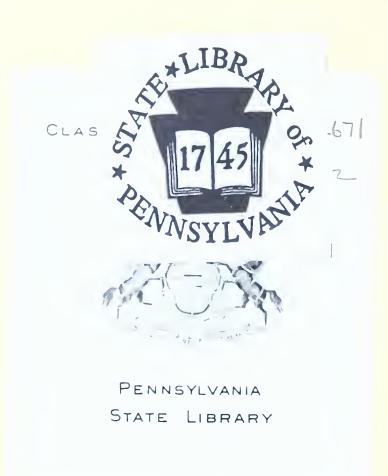
STATE LIBRARY OF PENNSYLVANIA stks, over 590.7H2671 Memoirs of the Museum of Compa 0 0001 00672530 1











### MEMOIRS

OF THE

## MUSEUM OF COMPARATIVE ZOÖLOGY

AT

# HARVARD COLLEGE.

VOL. XXII.

(ATLAS.)

CAMBRIDGE, U.S.A.
PRINTED FOR THE MUSEUM.
1896.

S-0 590.7 H2671 v.22 ATLAS Memoirs of the Museum of Comparative Zoology at Harvard College Combaraciáe 200 1021 --

UNIVERSITY PRESS: JOHN WILSON AND SON, CAMBRIDGE, U.S. A.

#### CONTENTS.

REPORTS ON THE RESULTS OF DREDGING, UNDER THE SUPERVISION OF ALEXANDER AGASSIZ, IN THE GULF OF MEXICO (1877-78), IN THE CARIBBEAN SEA (1878-79), AND ALONG THE ATLANTIC COAST OF THE UNITED STATES (1880), by the U. S. Coast Survey Steamer "Blake," Lieut.-Com. C. D. Sigsbee, U. S. N., and Com. J. R. Bartlett. U. S. N., Commanding. Published by Permission of Carlile P. Patterson and W. W. Duffield, Superintendents of the U. S. Coast and Geodetic Survey. XXXVI. OCEANIC ICHTHYOLOGY, A TREATISE ON THE DEEP SEA AND PELAGIC FISHES OF THE WORLD, BASED CHIEFLY UPON THE COLLECTIONS MADE BY THE STEAMERS "BLAKE," "ALBATROSS," AND "FISHHAWK," IN THE NORTHWESTERN ATLANTIC, with an Atlas containing 417 Figures. By George Brown Goode and Tarleton H. Bean. Published in Connection with the National Museum and the Smithsonian Institution.

(ATLAS.)



# Memoirs of the Museum of Comparative Zoölogy AT HARVARD COLLEGE.

Vol. XXII.

(ATLAS.)

#### REPORTS

ON THE

### RESULTS OF DREDGING.

UNDER THE SUPERVISION OF

#### ALEXANDER AGASSIZ,

IN THE GULF OF MEXICO (1877-78), IN THE CARIBBEAN SEA (1878-79). AND ALONG THE ATLANTIC COAST OF THE UNITED STATES (1880),

BY THE

#### U. S. COAST SURVEY STEAMER "BLAKE,"

LIEUT. COM. C. D. SIGSBEE, U. S. N., AND COM. J. R. BARTLETT, U. S. N., COMMANDING.

[Published by permission of Carlile P. Patterson and W. W. Duffield, Superintendents of the U. S. Coast and Geodetic Survey.]

#### XXXVI.

### OCEANIC ICHTHYOLOGY,

A TREATISE ON THE DEEP SEA AND PELAGIC FISHES OF THE WORLD, BASED CHIEFLY UPON THE COLLECTIONS MADE BY THE STEAMERS "BLAKE," "ALBATROSS," AND "FISHHAWK," IN THE NORTHWESTERN ATLANTIC,

WITH AN

ATLAS CONTAINING 417 FIGURES.

BY

GEORGE BROWN GOODE AND TARLETON H. BEAN.

Published in Connection with the National Museum and the Smithsonian Institution.

CAMBRIDGE, U.S.A.:
Printed for the Museum.
September, 1896.



### TABLE OF CONTENTS.

Names of genera and species.	Plate and figure.	Page.
NTRODUCTION		]
ABLE OF CONTENTS		
AST OF THE NEW GENERA AND SPECIES WITH ETYMOLOGIES		XX
JST OF PLATES	**************	
farsipobranchii,		
IYPEROTRETA:		
Myxinide—		
Myxine, L.—	* -	
M. glutinosa, L.	$\mathbf{I}, 1$	
australis, Jenyns	1, 2	
IYPEROARTIA: Petromyzontidæ—		
Petromyzon, Artedi— P. marinus, L		
Bathymyzon, Gill—		
B. Bairdii, Gill		
LASMOBRANCHII.		
ECTOSPONDYLI:		
Seymorlinidæ—	1	
Seymuorhinus, Cuv.—		
S. lichia, Bonn		
Somniosus, Le S.—		
S. microcephalus, (Schu.)	HI. 8	
rostratus, (Risso)		
Echinorhinus, Bl.—		
E. spinosus, Gm	III, 9	
Etmopteridæ—	, -	
Etmopterus, Raf.—		
E. spinax, L	V, 18	
pusillus, (Lowe)	H, 5	
granulosus, Gthr		
Paracentroscyllium, Alc.—		
P. ornatum, Alé		5
Centroscyllium, M. & H.—		
C. Fabricii, (Rhdt.)	II, 7	
granulatum, Gthr		
Seymnodon, B. & C.—		
S. ringens, B. & C.	IV, 12	
Centrophorus, M. & H.—	***	
C. uyatus, (Raf.)		
lusitaniens, B. & C		
crepidater, B. & C		
squamosus, Gmel		
Dumerilii, (Johnson)		
calceus, Lowe		
squamulosus, Gthr		l d
foliaceus, Gthr Centroscymnus, B. & C.—		·
C. cœlolepis, B. & C.	IV, 13	14, 8
obscurus, V		14,
Oxynotus, Raf.—		
O. ceutrina, (L.)	VI, 21	
STEROSPONDYLI:	, 1, 21	
Scylliorhiuidæ—		
Scylliorhinus, Bl.—		
S. retifer, Garman	IV, 14, 15	16.
profundorum, G. & B.	V, 16	
hispidus, Alc		
canescens, Gthr		(
Galeidæ—		
Mustelus—		
M. hinnulus, Bl		
Pseudotriacis, Capello—		
P. microdon, Capello	V, 17	18,
Pristinrus, Bon.—		
P. melastomus, (Raf.)	III, 10	20,
atlanticus, V	VI, 20	

Plate and figure.	f get result apprecies.
-	***
	A
	( 0 00 1
	0 1 / 1 - x - x - x - x - x - x - x - x - x -
	( , , = 1 1111
V, 19	trible H.
	Columbia de la Frita
	Chimplosel whose Garman
VI, 22	Late
	A. site 6
IX, 27	13. c. l 13. cadi da, Don
VII, 23	Acl. eyr, terman
VIII, 26	Ack et i, origita, Carman plutoma, Garnen
V111, 25	encularis, Couch ermoces, Mitchill
IX, 28	hyperborea, Collett
	Levis, Mitchillgramlata, Gill
	batis, L
	fullonica, L vomer, Fries
	nidrosiensis, Collett
	m unillidens, Ale isotrachys, Gthr
	In tea, Pries
	Hossada, Risso
	aleutica
	trachura abyssicola
	Trygonida Urolophus karanus
	(modei
	Hologuphali: Chimarida—
31.01	Chim era, L.—
	C. monstrosa, L affinis, Capello
	Callorhynchus, (Gronov.)—
A, 10	C. antarcticus, (Lac. Hydrolagus, Gill—
	H. Colliei, (Bennett). Harriotta, G. & B.—
X1, 37-40	H. Raleighana, G. & B
	MALACOPTURYGH: Alepo(ephalide—
	Alepo ephalus, Risso—
	A. rostratus, Russo
X111, 46	productus, Gill
	niger, Gthr Bairdii, G. & B.
	Pl infordii, Ale
	bicolor, Alcedentul is, Alc
	tenebrosus. Conocara, G. & B.—
XIII, 48	C. MacDonaldi, G. & B.
XII, 43	macropters, (V. , G. & B.  Eatlytroctes, Gthr.—
	B. macrolepis, Gthr.
	stomins, Gilb rostratus, Gthr
	microlepis, Gthr
	melanocephalus, V
	attritus, V.
	attritus, V squamosus, Ale
	affritus, V
	X, 31 X, 27 VII, 26 VIII, 25 IX, 28 IX, 29 IX, 30 XI, 37-40 XII, 41 XIII, 45 XIII, 46 XIV, 52 XIII, 47 XIII, 48 XIII, 44

Names of genera and species.	Plate and figure.	Page.
LACOPTERYGII—Continued. Alepocephalidæ—Continued.		
Narcetes, Alc.—		
N. eremilas, Alc		45, 5
P. apus, 6thr	XV, 53	
Xenodermichthys, Gthr.—		
X. nodulosus, Gthr Aleposomus, Gill—	XVI, 57	46, 5
A. Copei, Gill	XIV, 51	4
socialis, (V.), G. & B	XVI, 58	
Güntheri, (Alc.), G. & B. Leptoderma, V.—		
L. macrops, V	XV, 56	
Anomalopterus, V.— A. pinguis, V	XV, 54	
Aulastomatomorpha, Alc.—		,
A. phosphorops, Alc	XV, 55	50, 5
Pterothrissidæ (= Bathythrissidæ, Gthr.)— Pterothrissus, Hilg.—		
P. gissu, Hilg		
Argentinide—		
Argentina, Art.— A. sphyræna, L		
silus. (Asc.). Nils	X VII, 61	
striata, G. & B elongata, Hutton	XVII, 62	
sialis, Gilbert.		5
Leuroglossus, Gilb.—		
L. stilbius, Gilb		Ε
Microstoma, Cuv.—		
M. rotundatum, (Ris.), Gthr	XVI, 59	F0 5
grænlandieum, Rhdt (=Nanseuia grænlandiea, J. & E.) Bathylagidæ-	-	<b>5</b> 3, 5
Bathylagus, Gthr.—		
B. atlanticus, Gthr	XVII, 63	
euryops, G. & B Benedicti, G. & B	XVII, 63 XVII, 64	
Benedicti, G. & Bantarcticus, Gthr		
pacificus, Gilb		5
Synodus, (Gr.), Scop.—		
S. saurus, (L.)		
atlanticus, Johns intermedius, Spix	1	
kaianus, Gthr		
Bathylaco, G. & B.— B. nigricans, G. & B.—	XVIII, 69	
Bathysaurus, Gthr.—	. X V 111, 09	
B. ferox, Gthr. (=B. Agassizii, G. & B.)	X VIII, 65, 66	58, 5
mollis, Gthrobtusiristris (Vaillant)		F
Harpodon, Les.—	1	
H. macrochir, Gthr	XVI, 60	FO .
squamosus, Ale		59, 5
Chlorophthalmus, Bon.—		
C. Agassizii, Bon		co :
chalybeius, Goodeproductus, Gthr	XIX, 71	60, 8
nigripinnis, Gthr		
truculentus, G. & B	XIX, 72	5
gracilis, Gthrcorniger, Alc		· ·
Benthosauridæ—		
Benthosaurus, G. & B.— B. grallator, G. & B.	XIX, 73	
Bathypteroidæ—	2017, 10	
Bathypterois, Gthr.—		
B. longifilis, Gthr dubius, V	XX, 74	
quadrifilis, Gthr	XX, 75	
Güntheri, Alc		64, 5
insularum, Alclongipes, Gthr		64, 5 66, 5
longicauda, Gthr	2222, 10	00,
To a sect of		
Ipnopide— Ipnops, Gthr.—	1	

Page.	Plate and figure,	Sugar of granters and spectes.
		y tonta rol.
		Frank 1
68	XX1,77	E. a olor, to & B.
00	27.571, 11	Cethantina
69	XXI, 78	Cotom mus, G. & B G. G. In, G. & B.
65	XX1, 79	Storeri, G. & B
		My copinde
71	XXII, 80	Myctoph un, Raf M. pun tatum, Raf
72		affine, Lutken), G. & B
72,511	XXII, 81	opal num, G. & B
7.	XX11, 82	Humboldtr, Risso
71		gracile (Lutken), G. & B Benoti, (Coeco), G. & B
71		Reinhardtu, (Lütken
75 75	XXII, 84	remiger, G. & B. Hygomir, Lütken , G. & B.
77		Veranyi, Moreau)
77 511		Heideri, Stalling) pterotus
511		ealifornienso
511 512		arcticium
312		Townsendi Benthosema, G. & B.→
76	XXII, 85	B. Mulleri, (anel.), G. & B.
78 78		arcticum, [Liitken], G. & B. Colletti, [Liitken], G. & B.
		Lampanyctus, Bon.—
79 79	XXIII, 86 XXIV, 92	L. crocodilus, (Risso), G. & B alatus, G. & B
79	XX1V, 90	Guntheri, G. & B.
80 512 80	XXIII, 88	Warmingii, (Liitken), G. & B
80	XXIII, 87	genunifer, G. & B Gene Harri, Cocco), G. & B.
81	3.3.11.00	caruleus, (Klun. , G. & B.
81	XXIV, 89	Licerta, G. & B. Ceratoscopelus, 6thr.—
82	XXIV, 91	(, maderensis, (Lowe)
83	XXV, 91	Notoscopelus, Grhr.— N. resplendens, (Richardson)
83, 512	XXVI, 97	quercinus, G. & B
84 84	$\begin{array}{c c} XXV1,98 \\ XXV,95 \end{array}$	margaritiferus, G. & B
84	XXV, 96	castancus, G. & B caudispinosus, (Johnson)
0.5		Lampadeus, G. & B.—
$\begin{array}{c} 85\\512\end{array}$		L. speculigera, G. & B. pyrsobola
01		Althoprora, G. & B.—
86 87	XXVII, 101 XXVII, 102	A. metopoclampa, (Cocco), G. & B. lucida, G. & B.
87	XXVII, 103	effulgeris, G. & B.
88	XXVI, 100	Colletti (, G, & B.— ( , B (times puri, (Cocco), G, & B.—
512		nocturn i, Poey , J. & E.
88	XXIV, 93	Di phus, Eigenmann Di theta, Eigenmann
512		engrindis, Gthr., Eigenmann.
512		curulous, Khunzinger.
88	XXVIII, 105	Tarletonbeania, Eigenmann.— T. tenua (Eigenmann)
512		crenul ire
90	XXVIII. 104	Riunoscopelus, Lutken— R. Coccoi, Coccoj, G. & B
90		Andrew, (Lütken), G. & B.
91,512 $512$		rums, (Ehrken , G. & B. anthetreus
		Electrona, to & B.—
91	XXVIII. 107	L. Rissoi, Checo, G. & B
92	XXVIII, 106	Dasyscopelus, (4thr.— D. asper, (Richardson)
92		spinosus, Steindachner)
92		subasper, Gthr
93, 512	XXIX, 108, 109	N. macrolepidotus, Johns

Names of genera and species.	Plate and figure.	Page
MALACOPTERYGH—Continued. Myctophidæ—Continued. Scopelengys, Alc.—		
S. tristis, Alc		93, 512
N. MacDonaldi, G. & B. Scopelosaurus nigrum, Gthr		94 94
leucopsarum		512
Ichthyococcus, Bon. (= Coccia, Gthr.)— I. ovatus, (Coc.), Bou		95
Opisthoproctus, V		95 513
Maurolieus, Cocco—		0.0
M. borealis, (Nils.), Gthr. amethystinopunctatus, Corco. Poweriæ, Cocco		96 96 96
Pennanti		96
australis, Hector Vinciguerria, J. & E		96 513
V. attenuata, (Cocco), J. & E		513
Valencienellus, J. & E		513 513
Chauliodontidæ— Chauliodus, Schn—		
C. Sloani, Schn		96
Macouni, BeanGonostomidæ—	· · · · · · · · · · · · · · · · · · ·	513
Gonostoma— G. denudatum, Raf	XXXI, 116	98
brevidens, K. & S.	XXX1, 116 XXX1, 117	98
Cyclothone, G. & B. C. microdon, (Gthr.), G. & B. (= C. lusca, G. & B.)	XXX, J11	99, 514
bathyphila, (V.), G. & B. quadrioculatum, V. (?)	XXXI, 118	100 100
elongata (Gthr.), G. & B. (= Sigmops stigmaticus, Gill) graeilis, Gthr	XXXII, 119	101 101
Bonapartia, G. & B.— B. pedaliota, G. & B.—	XXXII, 120	102
Yarrella, G. & B.— Y. Blackfordi, G. & B.	XXXII, 121	103
Diplophos, Gthr.— D. tænia, Gthr	XXXIV, 126	104
pacificus, Gthr		104
P. argenteus, Hutton	XXXII, 122	10.
Manducus, G. & B.— M. maderensis, (Johns.), G. & B		514
Astronesthide— Astronesthes, Rich.—		
A. niger, Rich		105, 513
gemmifer, G. & B Richardsoni, Pocy		105 106
Stomiatide—		
Stomias, Cuv.— S. ferox, Rhdt	XXXIV, 127	107
boa, (Risso), Cuv affinis, Gthr	XXXIV, 128	108 108
nebulosus, Ale		108, 515
elongatus, Ale Echiostoma, Lowe—		108
E. barbatum, Lowe	XXXV, 130	109
margarità, G. & B Opostomias, Gthr.—	1	109
O. micripnus, Gthr	XXXV. 132	110
G. dentatus, G. & B Pachystomias, Gthr.—	XXXV, 133	110
P. microdon, Gthr Bathophilus, Gigl.—	XXXVI, 134	111
B. nigerrimus, Gigl	XXXVI, 136	111
Eustomias, V.— E. obscurus, V.— Photomostos Cthr. (— Lucifer Duduklaia)	XXXVI, 135	111
Photonectes, Gthr. (= Lucifer, Doderlein)— P. albipinnis, Döderlein gracilis, G. & B	XXXVI, 137	11: 11:

Names of genera and species.	Plate and figure.	Page.
A DESCRIPTION Continued.		
Mars ted -		
Mal posteria, Ayrea-	W.N.N.11 100	-
M. niger, Ayres. choristodactylus, V	XXXVII, 138 XXXVII, 139	1
indicus, Ctlr	212121 711, 100	1
Photostomias, Collett -		
P. Guernei, Collett	XXXVII, 140	1
Thaum (stour) is, Alc.— T. atrox, Alc.—	XXXVII, 141	1
Alepis mrd e	20.000 111, 121	1
Alepis (urus, Lowe -		
A. fcrox, Lowe		1
asculapius, Pean		1 1
altivelis, Poey		1
l'oeyi, tall		1
borealis, (all		5
serra, Gill		5
Paralepis, Risso—		
P. coregonoides, Risso		119, 5
sphyr.enoides, Risso		119, 5
intérmedius, Poey hyalinus, Raf	***************************************	120, 5 5
Rissot, Bk		5
Cuvieri, Bon		118, 5
speciosus, Bellotti		118, 5
Arctozenus— A. borealis, (Rhdt.), J. & G.	XXXVIII, 143	119, 5
cornscans.	AAA + 111, 143	5
Sudis, Raf. —		
intermedius		1
S. hyalina, Raf		1 1
ringens Odontostomidæ—		,
Odontostomus, Cocco—		
O. hyalinus, Cocco		1
ntratus, Ale		5
Omosudis, Gthr.— O. Lowen, Gthr	XL, 150	1
Sternoptychida-	1	_
Sternoptyx, Herm.—		
S. diaphana, Lowe Argyropeleens, Cocco—	XXXIX, 146	1
A. hemigymuus, Cocco.	XXXIX, 147	1
Alcocki, G. & B		j
Olfersii, (Cuv.), C. & V. D'Urvillii, C. & V.	XXXIX, 148	
D'Urvillit, C. & V.		]
aculeatus, Val Sternoptychides, Ogilby—	1	
8. amabilis, Ogilby		
Polyipuna, Gthr.		
P. spinosus, Gthr	XXXIX, 149	128,
Idiacanthus, Peters (= Bathyophis, Gthr.)—		
I. fasciola, Gthr		1
antrostomus, Gilb		ŧ
ferox, Gthr	XL, 151	
Halosaurida—		
Halosaurus—		
II. Oweni, Johns		
Johnsonianns, V		
Güntheri, G. & B parvipiunis, Alc		
Aldrovandia, G. & B.—		Ì
A. rostrata, (Gthr.)		
affinis, (Gthr.)	70 Y 3 4 P S	
macrochira, (18thr.) Goodei, Gill		
phalaerus, V	XLI, 156	
mediorostris, Gthr.		
gracilis, G. & B	XLII, 157	]
pallida, G. & B	XLII, 158	]
Íloskynii, Alc anguilliformis, Alc		5
Halosaurichthys, Alc.—		
		136, 3

Names of genera and species.	nd figure. Pa	age.
APODES:		
Leptocephalidæ— Leptocephalus—		
L. vulgaris (L.)		517
Uroconger, Kaup— U. vicinus, V	XLII, 160	138, 517
Congermuræna, Kaup—		,
C. guttulata, Gthr longicauda, Alc		138 138, 517
flava, G. & B. musteliceps	XLII, 159	138 517
squaliceps, Alc.		517
nasica, Alc prorigera, Gilb		517 138
Coloconger, Alc.—		
C. raniceps, Alc	••••	139, 517
Promyllantor, Alc.— P. purpureus, Alc		139, 517
Simenchelyidæ—		
Simenchelys, Gill— S. parasiticus, Gill	XLIII, 161	139
Ilyophidæ—		
Ilyophis, Gilb.— I. brunneus, Gilb.—	XLIII, 162	141
Synaphobranchidæ—		
Synaphobranchus, Johns.— S. pinnatus, (Gronov.), Gthr	XLIV, 164	143, 517
brevidorsalis, Gthr		144
affinis, Gthr	• • • • • • • • • • • • • • • • • • • •	144
Histiobranchus, Gill— H. infernalis, Gill	XLIV, 165	145, 517
bathybius, Gthr	******	145
Murænesocidæ— Xenomystax, Gilb.—		
X. atrarius, Gilb	• • • • • • • • • • • • • • • • • • • •	146
trucidens Hoplunnis, Kaup—		517
H. diomedianus, G. & B	XLIII, 163	146
Sauromurænesox, Alc.— S. vorax, Alc		146, 517
Ophichthyidæ, Gill— Pisoodonophis, Kaup—		
P. cruentifer, G. & B.	XLIV, 166	147
Myrus, Kaup— M. pachyrhynchus, (V.)	XLV, 167	148
Nettastomidæ—	ALV, 101	140
Nettastoma, Raf.— N. melanurum, Raf		149, 517
brevirostris, Fac		149
parviceps, Gthr tæniola, Wood-Mason		$\frac{148}{512}$
Venefica, J. & D.—		
V. procera, (G. & B.), J. & D. proboscidea, (V.), J. & D.	XLV, 168	$\frac{149}{150}$
Chlopsis, Raf.—	1	
C. bicolor, Raf. equatorialis, Gilb.		150 150
Nemichthyidæ, Gill—		
Nemichthys, Rich.— N. scolopaceus, Rich	XLVI, 170	152
avocetta		153
Labichthys, Gill and Ryder— L. carinatus, Gill and Ryder	XLVI, 171	153
elongatus, Gill and Ryder. Gillii, Bean	XLVI, 172	153
infans, (Gthr.), G. and B.	XLVII, 173	$153 \\ 153$
Cyema, Gthr.—		
Spinivomer, Gill and Ryder—	LVIII, 176	154
S. Goodei, Gill and Ryder		155
Serrivomer, Gill and Ryder— S. Beani, Gill and Ryder—	XLVII, 175	155
Richardii, (V.), G. & B.		155
Gavialiceps, Wood-Mason— G. microps, Ale		156, 517
Investigator, G. & B. I. acanthonotus (Alc.)		518

Page.	Plate and figure.	Names of genera and species
		La Mint
		Su upl r 1 1 1 p
1	XLVIII, 178-180	Sacood are ex. Mitchill -  8. flage form, Mitchill -
		Larypharyngida —
159, 5	XLVIII, 177	Larypharynx, V.— L. polocanoides, V.
1	XLIX, 181, 182	Ga trostomus, Gill and Ryder G. Bairdii, Gill and Ryder
		Dysonama, Ale.
160, 5	1	D. bucephalus, Ale. D. sommopsis, Ale.
1	• • • • • • • • • • • • • • • • • • • •	D. maleiparus, Ale
		Dero htt yid.e —
1	XLV, 169	Derichthys, Gill— D. serpentinus, Gill
•	22137, 200	littrom:
		Notaeanthida— Notaeanthus—
1 1	L, 181; L11, 191	N. nasus, Bloch analis, Gill
1	L, 185	Bonapartii, Risso
I I	LH, 192 L, 186	sexspinis, Rich phasganorus, Goode
		Gigliolia, G. & B.—
1	LI, 187; LH, 193	G. Moseloyi, G. & B
1		P. Rissoanus, (P. & V.), Gthr
1	L1, 189; L11, 195	M. rostrata, (Coll.), G. & B.
1		Challengeri, (V.), G. & B. Lipogenyid e
1	T. T. 100 . T. T. 102	Lipogenys, G. & B.—
1	LI, 190; LH, 196	L. Gillii, G. & B
		Beryeid.e— Beryx, Cuv.—
175, 5		B. decadactylus, C. & V
176, 5		splendens, Lowe
<u>1</u> 1		affinis, Gthr.
		delphun, C. &. V. Melumphaes, Gthr.—
1	LIII, 198	M. typhlops, (Lowe), Gthr
1	LIV. 201	P. suborbitalis, Gill
1 1	LIV, 202	Bernii, (Gthr.) robustus, (Gthr.)
1	1.111, 200	crassiceps, (talir.)
1		megalops, (Lütken). mizolepis, (Gthr.)
5 5		microps, (Gthr.) eristiceps, (Gilb.)
5		lugubris, (Gilb.)
1	L111, 199	Scopelogadus, V.— S. corbs, V.
		Malacosarcus, Gthr.— M. macrostoma, Gthr
1		Poromitra, G. & B. $=$
1	* ***	
1	1.111, 200	P. capito, G. & B. Anoplog ister, Gthr.
	LIII, 200 LIV, 203	Anoplog (ster, Gthr. » A. cornutus, (C. & V.) Gthr.
1	,	Anoplog (ster, Gthr. = A. cornutus, (C. & V.), Gthr. Caulolepis, Gill = C. longidens, Gill
1	LIV, 203	Anoplog (ster, Gthr. ~ A. cornutus, (C. & V.), Gthr. Caulolepis, Gill = C. longidens, Gill Stephanoberycida —
1 1 1	LIV, 203 LV, 204 LV, 205	Anoplog (ster, Gthr. ~ A. cornntus, (C. & V., Gthr. Caulolepis, Gill — C. longidens, Gill .  Stephanoberycida — Stephanoberyx, Gill — S. Mon.e, Gill .
1 1 1	LIV, 203 LV, 204	Anoplog (ster, Gthr. ~ A. cornutus, (C. & V. , Gthr. Caulolepis, Gall — C. longidens, Gill . Stephanoberycida — Stephanoberyx, Gill — S. Monze, Gill
1 1 1 1	LIV, 203 LV, 204 LV, 205 LVI, 206	Anoplog (ster, Gthr. ~
1 1 1	LIV, 203 LV, 204 LV, 205 LVI, 206 LVI, 207	Attoplog (ster. Gethr. #
1 1 1 1 1 5 5	LIV, 203 LV, 204 LV, 205 LVI, 206 LVI, 207	Anoplog (ster, Gthr. #
1 1 1 1 1 1 5	LIV, 203 LV, 204 LV, 205 LVI, 206 LVI, 207	Anoplog (ster, Gthr. #

Names of genera and species.	Plate and figure.	Page.
ELEOCEPHALI—Continued.		
Trachichthyida—Continued. Hoplostethus, C. & V.—		
H, mediterraneus, C. & V	LVI 208	189, 51
atlanticus, Coll		18
japonicus, Hilg		51
Bathyelupeidæ—		
Bathyclupea, Alc.— B. Hoskynii, Alc		19
argentea, G. & B	CXXIII, 415	19
Anomalopid:e—		
Anomalops, Kner— A. palpebratus, (Bodd.), Gthr		16
A. parpeoratus, (Bodd.), Gant		19
Thyrsites, C. & V.—		
T. atun, (Euphrasen), C. & V		19
Thyrsitops, Gill— T. lepidopoides, C. & V.		1.0
violaceus, Bean = Escolar violaceus J. & E	LVII, 209	19 195, 51
Ruvettus, Cocco—		100, 01
R. prétiosns, Cocco	LVII, 210	19
Nesiarchus, Johns.—		10
N. nasutus, Johns Epinnula, Poey—		19
E. magistralis, Poey	LVII, 211	19
Nealotus Johns —		
N. tripes, Johns		19
Promethichthys, Gill—		90
P. prometheus (C. & V.) $=$ P. atlantieus, Lowe promethoides, Blecher		20 51
bervalensis		51
Dicrotus, Gihr.—		
D. armatus, Gthr		20
parvipinnis, G. & B	LVII, 212	20
G. serpens, C. & V.		20
coluber, C. & V		20
Lepidopidæ—		
Lepidopus, Gonan— L. caudatus, (Euphrasen), White	T WHIT 019	20
Gouani, Bl	1. V 111, 215	20
lusitanicus, Shaw		51
xantusi G. & B.		51
Evoxymetopon, (Poey), Gill— E. tæniatus, Poey	T VIII O14	0/
Poeyi, Gthr	LVIII, 214	$\frac{20}{20}$
Benthodesmus, G. & B.—	1	20
B. atlanticus, G. & B	LV1H, 215	20
elongatus, Clarke		20
Aphanopus, Lowe— A. carbo, Lowe	LIX, 216	20
minor, Collett	L1A, 210	20
Trichiuridæ—		-
Trichiurus, L.—		0.00
T. lepturus, Linn	LIX, 217	208, 51
Coryphenidæ— Coryphena, L.—		
C. hippurus		20
equisetis		20
Branide—		
Brama, Schn.— B. Raii		21
chilensis		2
australis		2:
squamosa		2
orcini		2: 2:
Dussumieri Agassizii, Poey		$\frac{2}{2}$
Brevoorti, Poey		2
Saussurii, Lunel		2
longipinnis, Lowe		2
priuceps, Johns		$\frac{21}{21}$
Raschi, Esmark japonica, Hilg		21
Mark and the state of the state		-
Steinegeria, Jordan and Evermann—		
Stringeria, Jordan and Evermann— S. rubescens, Jordan and Evermann Pterycombus—		5.

Names of genera and species,	Plate and figure.	Page.
FOUNDATE Continued.		
Direth de—		
Duetmus, Johns.— D. argenteus, Johns., ( = Gyrinomene nummularis, Vaillant)	LXV, 231	211, 519
aurous, Campbell		211, 311
Pter e lid e -		
Pteraelis, Gronov.— P. pupulio, Lowe		213
ocellatus, C. & V		211
carolinus, C. & V		212
velifer, Pallas) Centrolophus, Lac.—	* * * * * * * * * * * * * * * * * * * *	212
C. pompulus, (Lac., C. & V		218
britannicus, Gthr		213
Schedophilus, Cocco——————————————————————————————————	LX1, 223	214
maculatus		214
Botteri, Stdchur.		
Icostens, Lockington— L'enigmations, Lockington	LX11, 224	210
Schedophilopsis, Stdchnr.—	13.11,1	210
S. spinosus, Stdehur	CXXIII, 416	216
Iciclithys, J. & G.— I. Lockingtonii, J. & G.——————————————————————————————————	T V 11 000	0.1.7
Acroticle	LA11, 226	217
Acrotus, Bean—		
A. Willoughbyi, Bean.	LX11, 225	217
Grammicolepidada— Grammicolepis, Poey—		
G. brachiusculus, Pocy.	LX1, 221	219
Nomeid.e-		
Nomens, Cuv.— N. Gronovii, (Gmel.), Gthr	LX111, 227	220, 520
Bathyseriola; Alc.—		220, 020
B. cyanea, Alc		220,521
Psenes, C. & V.— P. pellucidus, Lütken.	LX111, 228	221
maculatus, Lütken	LX III, 229	221
Luvarida—	,	
Euvarus, Raf.— L. imperialis, Raf	LXIV, 230	222, 521
Lampridida-	13211,200	222,021
Lampris, Retzins—		
L. regius, (Bonn.), Retzius		223
Zenopsis, Gill—		
Z. ocollatus, (Storer), Gill		22
conchifer, Lowe. Cyttus, Gthr.—		227
C. australis, (Rich.).		22:
abbreviatus, Hector		227
hololepia, G. & B	LXV, 233	228
novæ-zelandræ. Cyttopsis, Gill—		
Croseus, (Lowe), Gill		227
Oreosoma, C. & V.—		000
O, atlanticum, C. & V. C oproida—		228
Capros, Lac.—		
('. aper, (L.), Lac		229, 521
Caprominus— C. abbreviatus		
Antigonia, Lowe-		
A. capros, Lowe	LX V, 235	229
Tetragonurida— Tetragonurus, Risso—		
T. Cuvieri, Risso.	CXXIII, 417	230
Chilodipterida—	,	
Melanostoma, Döderlein— M. japonicum, Döderlein		521
Glossamia, Gill—		<i>02</i>
G. aprion, Gthr		233
Confidence of the control of the con	LXIV, 231	231
pandionis, (t. & B		
pandionis, (t. & B		239
pandionis, (t. & B		232 $232$ , $521$

Names of genera and species.	Plate and figure.	Page.
LEOCEPHALI—Continued.		
Chilodipteridæ—Continued.		
Pomatomichthys, Gigl.—		
P. Constanciæ, Gigl Microichthys, Rüpp.—		4
M. Coccoi, Riipp		6
Brephostoma, Alc.— B. Carpenteri, Alc.—		,
Acropomidæ—		4
Acropoma, T. & S.—		
A. philippinense, Gthr Scombropidæ—		235,
Scombrops, T. & S.—		
S. chilodipteroides, T. & S		4
oculatus, Poey Hypoclydonia, G. & B.—		6
H. bella, G. & B.	LXVI, 237	
Serranide—	,	
Centropristis, C. & V.— C. pleurospilus, (Gthr.)		4
investigatoris, (Alc.)		237,
annularis, Gthr		
Prionodes æquidens, Gilb Anthias, Schn.—		į.
A. megalops, Gthr		4
eos, Gilb		238,
aquilonaris, G. & B Bathyanthias, Gthr.—		2
B. roseus, Gthr		
Synagrops, Gthr.— S. japonicus, (Döderlein), Gthr		Ę
Polyprion, Cny.—		į
P. americanum, (Schn.), Jordan	LXVI, 238	238,
Pristipomatidæ— Propoma, Gthr.—		
P. roseum, Gthr		
Lutjanidæ—		
Aprion, C. & V.— A. macropthalmus, (Müller), J. & S	T XXXIX 314	9
Verilus, Poev—		4
V. sordidus Poey	LXIV, 232	2
Dentex, Cuv.— D. macrophthalmus, (Bloch), C. & V		4
Priacanthidæ—		1
Priacanthus, C. & V.—		011
P. catalufa, Poey		241, 3
P. altus, Gill	LXVI, 239, 240	6
Polymixide—		
Polymixia, Lowe— P. nobilis, Lowe	LXVII, 241	243, 8
Pomacentridæ—		210,
Chromis, Cuv.— C. roseus, (Gthr.), G. & B.		
Scorpænidæ—		4
Šcorpæna, L.—		0.15
S. scrofa obesa, Lowecristulata, G. & B.	LXVII 949	245,
ustulata, Lowe		6
Agassizií, G. & B percoides, Solander	LXVII, 243	
percoides, Solander		ę.
Bathysehastes S & D -		,
B. albescens, 6thr		-
Helicolenus, G. & B.— H. dactylopterus, (Del.), G. & B	LXVIII. 244	249, 5
maderensis, G. and B		2
Pontinua Door		
Pontinus, Poey—		2
P. castor, Poey		253, 5
P. castor, Poey pollux, Poey Kuhlii, (Bowdich), G. & B.		
P. castor, Poey pollux, Poey Kuhlii, (Bowdich), G. & B. Bibroui, (Sanvage), G. & B.		
P. castor, Poey pollux, Poey Kuhlii, (Bowdich), G. & B. Bibroui, (Sauvage), G. & B. filifer, (Val.), G. & B.		9
P. castor, Poey pollux, Poey Kuhlii, (Bowdich), G. & B Bibroui, (Sauvage), G. & B filifer, (Val.), G. & B canariensis, (Sauvage), G. & B Rathbuni, G. & B	LXVIII, 245	2 2 2
P. castor, Poey pollux, Poey Kuhlii, (Bowdich), G. & B. Bibroui, (Sauvage), G. & B. filifer, (Val.), G. & B. canariensis, (Sauvage), G. & B.	LXVIII, 245	2 2 2 2 2 2 2

Names of genera and species,	Plate and figure.	Page.
Trirocurnyli-Continued.		
Storpenide - Continued. Schastes, City.		
S. marinus, (L.), White	LX1X, 218	260
maranus viviparus, Krover)	***************************************	261
Selgstolobus, Call		
8 macrochir, Othr., Gill		262, 52;
alascanus, Bean Sebastodes, Gill	***************************************	261
S panerspinis, (Ayres, J. & ),		26:
Sebastichthys, Gill		
8. Goodei, Ligenmann		523
alutus, Gilb. rupestris, Gilb		52: 52:
zacentrus, Calb		523
saxicola, Calb	1	52
diploproagtillb		52
aurora, Gilb		52
introniger, Gilb sniensis, Gilb		52 52
oculatus, (C. & V.)		523
Setarches, Johns.—		
8. Gantheri, Johns		263
tidgiensis, Gthr		26) 26
parmatus, Goode	LXX, 219	20
L. longiceps, Gthr		265
Minous		
M. inermis, Alc		524
Cottus, L.—		
C. bathybii, Gthr		266, 524
Icelus, Kroyer—		
I. bicornis, (Rhdt.), J. & G		267
sentiger, Bean euryops, Bean		524 524
Artediellus, Jordan—		1929
A. uncinatus, (Rhdt. , Jordan	LXX1, 255	267, 524
Icelinus, Jordan—		· ·
1. quadriscriatus, Lockington		268
filamentosus, Gilbtenuis, Gilb		524 527
fimbriatus, Gilb		525
oculatus, Gilb		525
Triglops, Rhdt.—	7.7111.000	000 800
F. Pingelu, Rhdt Priomstus –	LXXI, 256	269, 525
P. macellus, Bean		525
Cottunculus, Collett—		
C. microps, Collett		269, 525
Thomsonii, Gthr. C. torvus, Goode)	LXX11, 258, 262	270, 525
Psychrolutes, Gthr.— P. zebra, Beau		525
paradoxus, Bean		525
Malacocottus, Bean—		
M. zonurus, Rean		272,525
Cyclopteridae (Cyclopterus)— Lumicrotremus, Gill—		
E. spinosus, (Müller), Gill	LXX, 250	272
Liparididae—		
Liparis, L.—		
L. lineatus, (Lepechin , Kröyer		274
Careproctus, Kröyer— C. gelatinosus, Pall.), Kr		275
spectrum, Beau		275
ranula, G. & B.		275
major, (Fab.), Garm		277
micropus, (Gthr.), Garm		277
Amitra, Goode— A. liparina, Goode	LXX, 252	278
Paraliparis, Coll.—	1721.74 , 2072	210
P. bathybii, Coll		279
Copei, G. & B	LXXI, 253	279
rosaceus, Gilb		525
Helgendorfia, G. & B.— H. membranacea, «Gthr.), G. & B		280
Gymnolycodes V —		
G. Edwardsi, V.	254	281

Names of genera and species.	Plate and figure.	Page.
ELEOCEPHALI—Continued.		_
Agonida—		
Podothecus, Gill— P. decagonus, (Schn.), Jordan	LXXII, 259	28
Bathyagonus, Gilb.—		40
B. nigripinnis, Gilb	******	283, 51
Xenochirus, Gilb.— X. triacanthus, Gilb		
pentacanthus, Gilb	• • • • • • • • • • • • • • • • • • • •	283, 51 283, 51
latifrons, Gilb		200, 52 52
Aspidophoroides Loc		-
A. monopterygius, (Bloch) Olriki	LXXII, 260	28
Olriki		28
Lopholatilus, G. & B.—		
L. chamæleonticeps, G. & B.	LXXV, 265	28
Percophidæ—	1	
Aphritis, C. & V.—		0.0
A. gobio, Gthr		28
A. grandisquamis, Gthr		28
Nototheniidæ—		
Notothenia—		
N. mizops, Gthr. longipes, Stndchnr.	•••••	52
Chænichthyidæ—	•••••••	52
Bathydraco, Gthr.—		
B. antarcticus, Gthr		28
Hypsicometes, Goode— H. gobioides, Goode—	T TTTT AGO	900 56
Bathyhereis, Alc. (= Bembrops) platyrhynchus, Alc	LXX1V, 263	290, 52 52
Champsodon, Gthr.—		<i>J</i> =
C. vorax, Gthr		291, 55
Chiasmodontidæ—		
Chiasmodon, Johns.— C. niger, Johns.—	T VVIV 001	909 5
Ponerodon, Alc.—	LXXIV, 264	292, 51
P. vastator, Alc.		20
Pscudoscopelus, Lütken—	1	
P. scriptus, Lütken	LXXVI, 266	292, 52
Uranoscopidæ— Uranoscopus, L.—		
U. crassiceps, Alc.		29
kaianus, Gthr		51
Batrachide— Perichthys, Girard—		
P. porosissimus, (C. & V.), Gthr	LXXVI, 267	29
Gobiidæ—	11XX V 1, 201	
Gobius, Cuv.—		
G. cometes, Alc.		295,52
Lesueurii, Risso		29
Jeffreysii, Gthr		
Callionymus, L.—		
C. lyra, L		29
kaianus, Gthr		29
calauropomus, Gthrcarlbares, Alc		29 29
phaeton, Gthr		29
himantophorus, G. & B.	LX X V I 268	29
maculatus, Raf		51
Stichæidæ— Carclophus, Nils.—		
C. Ascanii, (Walb.), Gthr.		20
Anarrhichadidæ—		<u>~</u> (
Anarrhichas, L.—		
A. lupus, L	LXXVII, 269	29
minor, Olafsenlatifrons, S. & H.	LXXVII, 270 LXXVII, 271	3( 3(
Ptilichthyidæ—	13AA VII. 241	3(
Ptilichthys, Bean—		
P. Goodei, Bean	LXXXVII, 304	30
Zoareida—		
Lycodes, Rhdt.— L. Vahlii, Rhdt		30
Esmarkii, Coll	LXXVIII, 272	3t 3t
reticulatus, Rhdt	LXXVIII, 273; LXXXI, 281	3(
frigidus, Coll	LXXVIII, 274	3(
mucosus, Rich		30

Names of genera and species. Plate and figure.	Page.
IALI—Continued.	
Le—Continued.	
codes, Rhdt. = Continued.   L. pall dus, Coll	30
perspicillim, kr. LXXX	
Lartkerar	30
semundus, Rhdt	
Sarsti, Coll. zoarchus, G. & B. LXXIX, 276; LXXXI	30° 30° 30°
brevipes, Bean	
macrops, Gthr	52
cenchelys, Gill— - Lanur ena, (Coll.), Gill	30
Verrillii, (G. & B.), Joidan LXXIX	
paxillus, (G. & B. , Jorean LXXX, 279	
porifer, talb	
(dbus, (V.), G. & B., codonus, G. & B., −	52
LXXX	, 280 31
rodon, talb. —	-
A. Corteziana	52
- Laprenheus, Coll.	52
paxillus, Gilb	
throcara, Bean - B. mollis, Beau	52
_ Б. шонь, Бе ш	
M. pusilla, Bean	52
brunnea, Bean	52
mnelis, Rhdt. - G. viridis, - Fab.), Rhdt	31
codapus, Gilb.—	
L. fierasfer, Gilb	52
danostigma, Gthr.— M. gelatinosum, Gthr.— LXXXII	1, 284   31
M. gelatinosum, Gthr	., 201
thites, Rhdt:-	
B. fuseus, Rhdt.	31
annonus, Gill —	317, 52
gopus—	011,02
O. ater	
armatus, Dóderlein	52
- C. Mossori, Gthr	31
rubrirostris, Gilb	
ceoguster, Ale.— - 8. maculatus, Ale	318, 52
s, maculatus, Ale płacan(hopoma, Gthr.—	310, 32
D. brachysoma, 6thr	319, 52
Alcocki, G. & B	52
eromita, G, & B.— - D. Agassizu, G, & B.— LXXXII	1, 285 31
metriostoma, (V.), G. & B.	
microphthalma, (V. 4. G. & B	32
oncerocephala, (Y.), G. & B	32
ssozetus, Gill	1. 287 32
compressus, (Gthr.), G. & B	32
tama, (6thr.), G. & B.	
catena, G, & B. LXXXII glutinosus, Alc	I, 286 32 322, 52
vptophidinm, Ale —	022,02
G. argenteum, Alc	
macropus Alc	$\dots$ 52
rmatorus, Alc.— D. trichiurus, Alc	325, 52
melanocephalus, Ale	
obythi(es, G. & B. (= Pycnocraspedim Alc.)—	
N. Gilli, G. & B. LXXXIII marginatus, G. & B. LXXXIII	
macrops, Gthr	, , , , , , , , , , , , , , , , , , , ,
crassus, (V.), G. & B	32
steatitions, Alc	
squamipinnis	32
B. robustus, G. & B. LXXXII	
muraenolepis, (V.), G. & B.	32

Names of genera and species.	Plate and figure.	Page.
LEOCEPHALI—Continued.		
Brotulidæ—Continued.		
Bassogigas, Gill—		
B. Gillii, G. & B.	LXXXIII, 291	328, 53
grandis, (Gthr.), G. & B.		329, 5
pterotus, (Alc.), G. & Bstelliferoides, (Gilb.), G. & B		328, 5
Alcockia, G. & B.—		328, 5
A. rostratus, (Gthr.), G. & B		3:
Celema. G. & B.—		0.
C. nuda, (V.), G. & B		3
subarmata, (V.), G. & B		3
Mæbia, G. & B.—		
M. gracilis, (Gthr.), G. & B		3
Barathrodenus G & B	ì	
B. mauatinus, G. & B	LXXXIV, 294	3
Pycnocraspedum, Alc.—		
P. squamipinne, Alc		333, 5
Nematonus, Gthr.—		, -
N. pectoralis, (G. & B.), Gthr	LXXX1V, 295	3
Porogadus, G. & B.—		
P. miles, G. & B	LXXXIII, 292	3
Penopus, G. & B.—		
P. MacDonaldi, G. & B	LXXXIV, 293	3
Acanthonus, Gthr.—		
A. armatus, Gthr		3
Tauredophidium, Alc.— T. Hextii, Alc	I VVVIV 900	9
Pteroidonus, Gthr.—	LXXXIV, 296	3
P. quinquarius, Gthr		3
Dierolene, G. & B. (=Paradicrolene, Alc.)—		V
D. introniora G. & B	LXXXV 297	3
D. intronigra, Ġ. & B. multifilis, Ale	137.777, 201	337, 5
nigricaudis, Alc		338, 5
Vaillantii, Alc		338, 5
Mixonus, Gthr.—		
M. laticeps, Gthr	LXXXIV, 296	3
Sirembo, Blk.—	i	0
S. inermis, (Schl.), Blk	•••••••••	3
Monomitopus, Alc.— M. nigripinnis, Alc.		340, 5
Typhlonus, Gthr.—		010,0
T. nasus, Gthr		3
Barathronus, G. & B.—		
B. bicolor, G. & B	LXXXV, 298	3
Aphyonus, Gthr.—		
A. gelatinosus, Gthr	**************************************	3
mollis, G. & B	LXXXV, 299	3
Rhodichthys, Coll.— R. regina, Coll	LXXXVI, 303	3
Alexeterion, V.—	HAXA V 1, 300	U
A. Parfaiti, V	LXXXVI, 300	3
Bellottia. Gigl.—	1	
B. apoda, Gigl	,	3
Hephthocara, Alc.—		
H. simum, Alc		3
Lamprogrammus, Alc.— L. niger, Alc.	T V V V V T 202	244.5
fragilis, Alc.	LAXX V1, 302	344, 5 5
Ophidiidæ—		
Ophidium—		
O. murænolepis, Gthr		5
Otophidium, Gill—		
O. omostigma, (J. & G.), Jordau	LXXXVII, 305	3
Leptophidium, Gill—	T 3/3/3/3/3/	
L. cerviuum, G. & B. profundorum, Gill	LXXXVII, 306	3
profundorum, Gill	1 X X X V II , 307	3
marmoratum, G. & B pardale, Gilb	11.3.3.3 111, 308	3
microlepis, Gilb		5
stigmatistium, Gilb		5
emmelas, Gilb		5
Ateleopodidæ—		
Ateleonus Schl —		
A. japonicus, Schl		3
indicus, Alo		349, 5

Page.	Plate and figure.	Names of genera and species.
		portion
		Lophotes, Giorna -
3:	CXV, 389	L. Cepedianus, Giorna
38		cristatus, Johns Capada, F. & S
		V - CONTINUE
		tering Art.
3.	************	G. morrhua, L.
351, 53		Mel mogrammus, Gill — M. leglennas, T., teill .
0.71,00		
		B. immutus, T., Gill.
355, 50		Gadiculus, Guich
1,1,1,1		Micromesistius, tall -
355, 53		M. poutassou, (Risso), Gill.
50		Merlingus — M. vulgaria
		Phycis, Schu.—
3. 3.		P. mediterraneus, Delaroche Larlu, G. & B
357, 50		Idenmoides, (Br.), 8(hu
3.	EXXXVIII, 309	regius, (Walb.), J. & B
3; 3;	LXXXVIII, 310 LXXXVIII, 311	chuss, (Walb   Gill .
3:	LXXXIX, 312	tennis, (Mitch.), DeKay
3(	LXXXIX, 313	Chesteri, G. & B. Læmonema, Gthr.—
30		L. Yarrellii, (Lowe), Gthr
30		robustum, Gthr.
36 36		barbatula, G. & B. melanurum, G. & B.
77(		Molva, Nils.—
30		M. vulgaris, Flem.
36 36		byrkelauge, Walb elongata, (Otto), 6thr
		Physicalus, Kaup—
366, 53 36		P. Dalwigkii, Kaup
36	***************************************	peregrinus, Gthr
30	XC1, 319	fulvus, Bean
55 57	1	rastrelliger, Gilb nematoous, Gilb
55		rosens, Alc.
53	***************************************	argyropastus, Ale Uraleptus, Costa—
36	XC1, 320	F. Maraldi, (Risso), Costa
3(	***************************************	near Maraldi
36	ХСИ, 321	Lotella, Kaup— L. maxillaris, Bean
		Mora, Risso—
369, 53	XCH, 322	M. mediterranea, Risso
370, 53	XC11, 323	L. Rissoi, Sw
37		Güntheri, (GigL), G. & B.
371, 53		eques, (Gthr.), G. & B. ensiferns, (Gthr.), G. & B.
55		inosima, Gthr
		Salilota—
53		8. australis, Gthr
37		A. viola, (G. & B.), Jordan
37 55		rostrafa, Gthrmicrolepis, Bean
		Halargyrens, Gthr.—
270 51	XCIII, 325	II. brovipes, V.
376, 53 37		Johnsonii, Gthr
		Fretmophorus, Gigl.—
37		E. Kleinenbergi, Gigl
38		Hypstrhynchus, Fac.— H. hepaticus, Fac.————————————————————————————————————
		Strinsia, Raf —
38	XCIII, 326	5. tinea, Raf
38		M. gracilis, Gthr

Names of genera and species.	Plate and figure.	Page.
NACANTHINI—Continued.		
Gadidæ-Continued.		
Onos, Risso—	3:0:13:00	
O. ensis, (Rhdt.), Gill	XCIV, 327	38
macrophthalmus, Gthrbiscayensis, Coll		
Reinhardtii, (Kr.), Coll.		
tricirratus, (Bloch), G. & B		38
Rhinonemus, Gill—		1
R. eimbrius, (L.), G. & B.	XC1V, 328	384, 50
Brosmins, Cuv.—	31.77.3.5	1
B. brosme, (Müll.), Gthr	XCIV, 329	38
Brosmiculus, V.— B. imberbis, V.—		38
Merluciida—		30
Merlucius, Raf.—		
M. bilinearis, (Mitch.), Gill	XCV, 330	38
M. bilinearis, (Mitch.), Gill smiridus, (Raf.), G. & B		38
Bregmacerotide—		
Bregmaceros, Thompson—		
B. atlanticus, G. & B. MacClellandii, Thompson	XCV, 331	38
MacClellandii, Thompson		389, 51
Macruride— Macrurus, Bloch—		
M herolax Lac	XCVI 334	35
M. berglax, Lac sclerorhynchus, Val	110 ( 1, 001	39
smiliophorus, Vaill		3
æqualis, (Gthr.), G. & B		33
serratus, Lowe	İ • • • • • • • • • • • • • • • • • • •	3:
Bairdii, G. & B	XCVI, 335	3
holotrachys, Gthr	• • • • • • • • • • • • • • • • • • • •	3
zaniaphorus, V. (near holotvachys, V.) rudis, Gthr	• • • • • • • • • • • • • • • • • • • •	39
asper, Gthr.	•••••	3
stelgidolepis, Gilb		
carinatus, Gthr		
investigatoris, Alc		1390, 531, 53
semiquincunciatus, Ale	·	⊥ 390, 531, 53
Hoskynii, Alc		$\pm 390, 531, 53$
Hextii, Alc.	· · · · · · · · · · · · · · · · · · ·	390, 531, 5
Wood-Masoni, Ale		
Petersonii, Alcbrevirostris, Alc	• • • • • • • • • • • • • • • • • • • •	1 390, 531, 53 390, 531, 53
macrolophus, Alc		
lophotes, Alc		390, 531, 5
polylepis, Alc		390, 5
nasutus, Gthr		3
serrulatus, Gthr		3
hispidus, Ale		5
pumiliceps, Ale		5.
Cælorhynchus, Giorna— C. atlanticus, (Lowe), G. & B		397, 5
earninatus (Goode) G & B	XCVI 336	3
carminatus, (Goodé), G. & B. ocea, G. & B. japonicus, (V.), (near occa)	XCV, 332, 333, 337	4
japouicus, (V.), (near occa)		4
japonicus, Schl		400.5
earibbæus, G. & B.	XCVH, 338	4
fasciatus, (Gthr.), G. & B		4
parallelus, Gthr		5 532, 5
australis, Gthr quadricristatus, Alc.		
flavellispinis, Alc		5
Coryphænoides, Gunner—		
C. rupestris, Gunner		4
sulcatus, G. & B		403, 5
earapinus, G. & B	XCVII. 339	.1
altipinuis. Gthr		-1
serratus, Lowe		5
llymenocephalus, Gigl.— H. italicus, Gigl.		-1
Goodei, (Gthr.), Bean	XCVH, 310	4
cavernosus, G. & B.	XCVII, 341	1
heterolepis, Ale	25.0 7 11, 011	
Lionurus, Gthr.—		
L. filicauda, Gthr	XCV111, 342	4
Trachonurus, Gthr.— G. sulcatus, G. & B.		
	XCVIII, 343	4

Nantes of genera and species.	Plate and figure.	Page.
ANA ANTOINTContinued. Margirel - Fontinued.		
Cotorfirms, Other. C. globiceps, V. crassicops, Gthe		411
Chalinura, G. & B. C. simula, G. & B. breatbarbis, G. & B.	XCVH4, 345	412 413
occidentalis, G. & B		$\frac{113}{414}$
fern indezianus, Gthr Ito-ephala, Gthr Mucraya, Gthr		412 412 412
serrula, Bean hispala, Ale mediterranea, Gigl		412 412 533
Optomirus, Othr. O. denticulatus, Gthr		414
M. Lévis, (Lowe), Gthr occidentalis, G. & B		415 415
suld evis, (V.)		535 416
g(g)s, V., G, & B attimes, (Gthr.) Moseloya, G, & B. —		J16 416
M. long(filis, Gthr.), G. & B Abyssicola, G. & B. A. macrochir, Gthr.), G. & B		417
Trachyrhynchus, Giorna— T. scabrus, (Raf.), G. & B.	C, 319	417, 534
Murrayi, Gthr		417, 531
M. novæ-zelandiæ, (Hector), Gthr Steindachneria, G. & B.— S. argentea, G. & B.	,	418, 534
Bathygadus, Gthr.— B. favosus, G. & B.	C1, 352	420
arcuatus, G. & B. Iougiillis, G. & B. near longifilis, Alc. dispar, (V.), G. & B.		421 422 423 423
macrops, G. & B. melanohranchus, V. cottoides, Gthr		423 424 420
multifilis, Gthr		420 535
Lyconus, Gthr.— L. pinnatus, Gthr.  HETI ROSGMATA: Plenronectide—		425
4.epidapsetta— 4. maeulata, Gthr Chascanopsetta, Alc.—		535
C. lugubris, Ale		535
P. maculosa, Alc. Limanda, Gottsche— L. vulgaris, Gottsche		535 427
microstoma, Gthr. ferrugines. (Storer), G. & В. Волии, Goode		427 427 428
Glyptocophalus, Gottsche— G. cynoglossus, (L.), Gill Hippoglossus, Cuv.—	CH, 356	430
H. vulgaris, Flem. Platysomatichthys, Blkr.—		434
P. hippoglossaides, (Walb.), G. & B. Paralichthys, Girard — P. oblougus, (Mitch.), J.		435
Hectoris, 6thr boops, Hector ocellatus, 6thr		436 436 436
Notosema, (r. & B.— N. dilecta, G. & B	C1V, 362; CVI, 365	437

Names of genera and species.	Plate and figure.	Page.
IETEROSOMATA—Continued.		
Pleuronectide—Continued.		
Hippoglossoides, Gottsche— H. platessoides, (Fab.), Gill	CVII 207	
Lepidorhombus, Gthr.—	CVII, 367	•
L. megastoma, (Don.), Gthr		
Boscii, (Risso)		439,
Scianectes, Alc.—		
S. lophoptera, Alcmacrophthalma, Alc	CVIII 371	4
Trichopsetta, Gill—		
T. ventralis, (G. & B.), Gill	CIX, 372	
Arnoglossus—		
A. Grohmanni, Bon Platophrys, Sw.—		ı
P. nebularis, J. & G	'	4
cornutus, Gthr		4
Citharichthys, Blkr.—		
C. arctifrons, Goode	CVI, 366	4
unicornis, Goode	CVIII, 369	4
spilopterus, Gthr	CVIII, 370	
dinoceros, G. & B		
pætulus, (G. & B.), J. & G	CIX, 373	
Etropus, J. & G.— E. rimosus, G. & B	OTT 900 901	
Cyclopsetta, Gill—	CIV, 360, 361	
C. fimbriata, G. & B	CVII, 368	
Monolene, Goode—	· · ·	
M. sessilicauda, Goode	CIII, 357	•
atrimana, G. & B	CII., 358	4
Solea, Cuv.—		
S. vulgaris, Quensel		
Greeni, Gthr		
umbralites, Alc		
Mieroehirus, Bon.— M. variegatus, (Don.), M.		
profundicolus, (V.), G. & B.		
Aphoristia, Kaup—		
A. nebulosa, G. & B	CX, 375	
septemstriata, Alc	OV 070	
marginata, G. & B pigra, G. & B		
diomedeana, G. & B	CX, 378	
pusilla, G. & B	CX, 379	
trifasciata		
Ammopleurops, Gthr.— A. lacteus (Bon.), Gthr.		
A = -1! = -17 =		
A. Carpenteri, (AIc.)	! 	
ANIOMI:		
Triglidæ, Risso—		
Trigla, Art.— T. cuculus, L		
gurnardus, L		
lyra, L		
leptacantha, Gthr		
spiloptera, Gthr		
hemisticta, Schl		
milvus, Bpcorax, Bp		
cavillone		
Lepidotrigla, Gthr.—		
L. cavillone, (Lac.)		
Prionotus, Lac.—	OVI 990 OVII 994	
P. militaris, G. & B egretta, G. & B	CX1, 380; CX11, 384 CX1, 381	
Stearnsii, J. & S	UA1, 301	
alatus, G. & B	CXI, 382	
palmipes, (Mitch.), Storer		
Beanii, Goode (wrongly named in plate P. trinitatis)	CXII, 383	
Peristediidæ— Peristedion, Lac.—		
P. miniatum, Goode	CXIII, 385	
	OZZZZZI OCO	
longispatha, G. & B. imberbe, Poey	CXIV, 386	

Names of genera and species.	Plate and figure.	Page.
assemble Continued.		
Peristed ble Continued.		
Peristedion, Lic. Continued,		
P. graetle, G. & B		47
platycephalum, G. & B. truncatum, Gthr		41
moluccense, Blkr		4
Murrayi, 6thr		470, 5;
Horhynchum, Gthrcataphractum, (L.)		4° 5;
Rivers Andersoni, Alc.		5.
ENTOSOMII		
Ira hypterida =		
1) ichypterus, Gouan— L. iris, (Walb.), C. & V	CXV, 301	4
graphurus, Lowe		4
arcticus, (Br. , Nils		4
Ruppellii, Gthr		4
hopterus, C. & V. cristatus, Bonelli		4 -I
repindus, Met., Costa		4
Spinote, C. & V		.1
altivelis, Kner		4
altivelis, Huttonarawata, Clarke		4
Regulecide -		·
Regaleens, Brun.—	(13.1.11.00*	
R. glesne, Asc. pacificus, Haase	CXVII, 395	4
argenteus, Ilutton		4
Stylephorida-		
Stylephorus, Shaw—	(17.17.1 000 004	4
S. chordatus, Shaw	CXVI, 393, 394	4
Macrorlamphosida—		
Macrochamphosus, Lac.—		
M. scolopax, (L.)	CXVII, 396	4
Aulostomida— Aulostoma, Lac.—		
A. coloratum, M. & T.		4
chinense, L		-1
longipes, V	CXVII, 397	4
Lophudæ—		
Lophius, Art.—		
L. piscatorius, L.		4
budegassa, Sp. Naresii, Gthr		$\frac{4}{4}$
Lophiomus, Gill-		
L. setigerus, (Walıl), Gill		4
Lophiodes, G. & B.—		-
L. mutilus, (Alc.) Jugubris, (Alc.)		5 5
Antennariid e		
Pterophryne, Gill—		,
P. histrio, (L.), Gill Antennarius, Cuv.—		4
A. pleurophthalmus, Gill		4
Chaunay, Lowe-		
C. pictus, Lowe	CXVII, 398	4
Ceratiolar— Ceration, Kr.—		
C. Holbölli, Kr	CXVII, 399	4
Diceratias, 6thr.—		
D. bispinosus, Gthr		4
Magcalias, Gill— M. granoscopus, (Murray), Gill———————————————————————————————————		4
Shufeldtii, Gill		4
Cryptopsaras, Gill—		
C. Cougsii, Gill	,	4
carunculatus, Gthr Oneirodes, Lütken—		4
2 (11) 1 (17) 1 (2) .		4
D. Eschrichtii, Lütken		
1). Eschrichtii, Lütken Paroneirodes, Alc.—		
D. Eschrichtii, Lütken		4

Names of genera and species.	Plate and figure.	Page.
Pediculati—Continued.		
Ceratiida-Continued.		
Corynolophus, Gill—		
C. Reinhardtii, (Lütken), Gill		1
Ægeonichthys, Clarke—		
A. Appelii, Clarke		4
Melanocetus, Gthr.—		
M. Johnsonii, Gthr	CXX, 406	1
Liocetus, Gthr.—		
L. Murrayi, Gthr	CXX, 407	-1
Linophryne, Collett—	GNINI (122	
L. lucifer, Collett	CXX1, 408	4
Caulophryne, G. & B.—	CINETY 400	
C. Jordani, G. & B. (plate as C. setosus)	CXXI, 409	4
Onchocephalidæ—		
Onchocephalus, (Fisch.), Gill— O. radiatus, (Mitch.), G. & B.		
		100
vespertilio, (L.), G. & B		499,
Malthopsis, Alc.— M. luteus, Alc		-
Halieutæa, C. & V.—		*.
H, stellata, C. & V.	CX1X, 403	4
onecinas Ale	CXXI 410	
eoccinea, Alc nigra, Alc	C.M.1, 410	
spongiosa, Gilb.		
fumosa, Ale		
Halientella, G. & B.—		,
H. lappa, G. & B	CXXII, 412	:
Dibranchus, Peters—	1	
D. atlanticus, Peters	CXXII, 413	:
nasutus, Alc		:
micropus, Alc		5
Haliemetus, Ale.—		
II. ruber, Alc		5
Halieutichthys, Poey—		
H. aculeatus, (Mitch.), Goode	CXXII, 414	Ē
PPENDIX:		
Additions and corrections		Ę
LPHABETICAL INDEX		อ็



### OCEANIC ICHTHYOLOGY.

### LIST OF PLATES AND FIGURES.

Note.—The actual size of the specimens from which the figures are drawn may, in most instances, be determined by the use of the inch mark beneath the engraving, which in the photographic reduction of the drawing is reduced in the same proportion as the drawing itself. Where this is not present, the scale of reduction is approximately indicated in this list of plates, except in the case of outlines copied from published figures and of large species of very variable length, such as the sharks and rays. Where no reference to length appears either upon the plate or in the list of figures, it may be assumed that the figure is of natural size, or nearly so.

#### PLATE I.

$\mathbf{T}$	ext page.
1. Myxine glutinosa, Linnæns.  Drawing by H. L. Todd, from No. 23466, U. S. N. M. (Gloncester Donation No. 287), N. lat. 43 33'. W. lon. 52° 10', 300 fathoms.	2
2. Myxine australis, Jenyns	
3. Petromyzon marinus, Liunæns	
PLATE II.	
4. Scymnorhinus lichia, (Bonnaterre), Bonaparte.  Drawing from Bonaparte, Fauna Italiea, Pl. 142.	7
5. Etmopterus pusillus, (Lowe), Günther.  Drawing by H. L. Todd, from a specimen collected by the steamer <i>Blake</i> at Station CVIII, of St. Kitt's, West Indies, in 208 fathoms. (About three-fourths natural size.)	
6. Scylliorhinus retifer, (Garman), Jordan	
7. Centroscyllium Fabricii, (Reinhardt), Müller and Henle	
PLATE III.	
8. Somniosus microcephalus, (Schneider), Goode and Bean	7
9. Echinorhinus spinosus, (Gmelin), Blainville Outline from Day, Fishes of Great Britain and Ireland, Vol. II, Pl. CLXII, Fig. 2.	
10. Pristiurus melastomus, (Rafinesque), Bonaparte	20
11. Centrophorus granulosus, Müller and Heule	

	PLATE IV.	
1_		page.
	Drawing from Bocage and Capello, Peix, Plagiost., Vol. i, Pl. i, Fig. f.	11
1.,	Centroscymnus cœlolepis, Bocage and Capello.  Drawing fiv H. L. Todd, from No. 26219, F. S. N. M., collected by the steamer Fish Hawk at Station 893, off Marthas Vineyard, N. lat. 39 52 20 . W. lon. 70 58 00 , in 372 fathoms.  About two-thirds natural size.)	1.4
11	15. Scylliorlinus retifer, (Garman), Jordan.  Drawings by H. L. Todd, from No. 26745, F. S. N. M., collected by the steamer Fish Hawk at Station 896, in N. lat. 37-26, W. lou. 71-49, at a depth of 56 fathous.	16
	PLATE V.	
fii.	Scylliorhinus profundorum, Goode and Beau.  Drawing by M. M. Smith, from No. 35616, U. S. N. M., collected by the steamer Albatross at Strtion 2231, in N. lat. 39 - 00 ; W. lon. 72 - 03 - f5 ; at a depth of 8f0 fathoms.	t 7
17	Spinax niger, Bonaparte.  Drawing from Bonaparte, Fauna Italica.	[()
15.	Pseudotriacis microdon, Capello.  Drawing by H. L. Todd, from No. 32516, U. S. N. M., from Amagansett, N. Y., collected by J. B. Edwards, keeper of Suffolk Life-Saving Station. (About one-seventeenth natural size.)	18
19.	Cetorhinus maximus, Gunner.  Drawing from Annales du Musée d'Hist, Nat. Paris, Vol. XVIII, Pl. VI; reëngraved from Fish, Ind., Pl. 219, upper tigure.	21
	PLATE VI.	
20.	Pristiurus atlanticus, Vaillant. Ontline from Vaillant, Explorations Scientifiques du Travailleur et Talisman, Pl. 1, Fig. 1.	21
21.	Oxynotus centrina, (Linucus), Rafinesque	15
22.	Chlamydoselachus anguineus, Garman	22
	PLATE VII.	
23.	Raia Ackleyi, Garman.  Drawing by J. C. Van Hook, from No. 13726, U. S. N. M., collected by the steamer <i>Blake</i> on Yucatan Banks, Gulf of Mexico.	25
21.	Raia Ackleyi ornata, Garman.  Drawing by J. C. Van Hook, from No. 43727, U. S. N. M., from the Museum of Comparative Zoölogy, collected at a depth of 438-412 fathoms. (Slightly enlarged.)	26
	PLATE VIII.	
25,	Raia circularis, Couch.  Outline from Day, Fishes of Great Britain and Ireland, Pl. CLXXIV.	27
26.	Raia plutonia, Gariann	27
	PLATE IX.	
27	Raia radiata, Donovau.  Drawing by H. L. Todd, from No. 23511, U. S. N. M., collected by the f'. S. Fish Commission off Provincetown, Mass. (About four-sevenths natural size.)	25
25.	Raia hyperborea, Collett.  Outline from Collett, Fishes Norwegian North Atlantic Expedition, Pl. 18.	28
29.	Raia lævis, Mitchill  Drawing by H. L. Todd, from No. 21577, U. S. N. M., collected by the steamer Fish Hawk at Station 771, in Narragansett Bay, at a depth of 8½ fathoms.	28
20,	Raia granulata. Gill.	29
	Drawing by H. L. Todd, from the type specimen, collected by Capt. Joseph W. Collins, of the Gloucester fishing fleet, on Le Have Bank. (About one-fourteenth natural size.)	

### PLATE X.

		10020
31.	Chimæra monstrosa, Linnaus. Outline from Bonaparte, Fauna Italica, Pl. 130.	31
32.	Chimæra affinis, Capello  Drawing by H. L. Todd, from a specimen collected on the southeastern portion of Le Have Bank, in N. lat. 42° 40′, W. lon. 63° 23′. (About one-seventh natural size.)	31
33-	35. Chimæra affinis, Capello	31
36.	Callorhynchus antarcticus, (Linnæus). Outline from Zoölogy of Beechey's Voyage, Pl. XXIII.	*)*/
	PLATE XI.	
37,	38. Harriotta Raleighana, Goode and Bean.  Drawings by M. M. Smith, from No. 35631, U. S. N. M., collected by the steamer Albatross at Station 2235, in N. lat. 39° 12′ 00′′, W. lon. 72° 03′ 30′′, at a depth of 707 fathoms.	;;:)
39,	40. Harriotta Raleighana, Goode and Bean.  Drawings by S. F. Denton, from No. 35520, U. S. N. M., collected by the steamer Albatross, at Station 2210, in N. lat. 39° 37′ 45″, W. lou. 71° 18′ 45″, at a depth of 991 fathoms. (About one and three-fourths natural size.)	33
	PLATE XII.	
41.	Alepocephalus rostratus, Risso Outline from Cuvier and Valenciennes, Histoire Naturelle des Poissons de la France, Pl. 566.	36
42.	Alepocephalus niger, Günther	38
43.	Conocara macroptera, (Vaillant), Goode and Bean. Outline from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XI, Fig. 2.	39
41.	Bathytroctes macrolepis, Günther Outline from Günther, Challenger Report, Vol. XXII, Pl. LVII, Fig. A.	41
	PLATE XIII.	
45.	Alepocephalus Agassizii, Goode and Bean	37
46.	Alepocephalus productus, Gill	37
47.	Alepocephalus Bairdii, Goode and Beau.  Drawing by H. L. Todd, from type No. 22468, U. S. N. M. (Gloncester Donation No. 305), collected by Christian Johnson, of the schooner William Thompson, on the Grand Banks, in 200 fathoms. (About one-fourth natural size.)	38
48.	Conocara McDonaldi, Goode and Bean  Drawing by S. F. Denton, from a specimen collected by the steamer <i>Blake</i> at Station CLXXII, in N. lat. 24° 36′, W. lon. 84° 05′, at a depth of 955 fathoms.	39
	PLATE XIV.	
49.	Bathytroctes antillarum, Goode and Bean.  Drawing by M. M. Smith, from type No. 43739, U.S.N.M., collected by the steamer Albatross at Station 2394, in N. lat. 28° 38′ 30″, W. lon. 87° 02′, at a depth of 420 fathoms.	44
50.	Bathytroctes æquatoris, Goode and Bean	1 1
51.	Aleposomus Copei, Gill	47

		page.
-	Pterothrissus gissu, Hilgendort.  Outline from Counther, Challenger Report, Vol. XXII, Pl. I.VI, Fig. A. (About one-half natural size.)	51
	PLATE XV.	
53,	Platytroctes apus, Günther	16
	Anomalopterus pinguis, Vaillant. Outline from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. X1, Fig. 4.	49
1.),	Aulastomatomorpha phosphorops, Alcock.  Outline from Wood-Mason, Natural History Notes from H. M. Indian survey steamer Investigator, No. 21, Fig. 1. (One-half natural size.)	50
ББ.	Leptoderma macrops, Vaillant.  OuMine from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XII, Fig. 2.	-19
	PLATE XVI.	
57,	Xenodermichthys nodulosus, Günther	46
	Outline from Günther, Challenger Report, Vol. XXII, Pl. I.VIII, Fig. C.	1.1
	Aleposomus socialis, (Vaillant), Goode and Bean. Outline from Vailtant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XIII, Fig. 1.	18
.)!),	Microstoma rotundatum, (Risso), Günther Ontline from Cuvier and Valenciennes, Histoire Naturelle des Poissons de la France, Vol. xvm, Pl. 511.	53
60,	Harpodon macrochir, Günther. Outline from Günther, Challenger Report, Vol. XXII, Pl. XLVII, Fig. A.	59
	PLATE XVII.	
61.	Argentina silus, (Ascanius), Nilsson  Drawing by H. L. Todd, from No. 37801, U. S. N. M., collected by E. H. Bunker, Fletchers Neck Life-Saving Station, Biddeford, Mc. (About one-half natural size.)	52
62.	Argentina striata, Goode and Bean.  Drawing by A. H. Baldwin, from type No. 43858, U. S. N. M., collected by the steamer Albatross at Station 2402, in N. Iat. 28 - 36, W. Ion. 85 - 33 - 30, at a depth of 111 fathoms.	52
63.	Bathylagus euryops, Goode and Bean Drawing by A. H. Baldwin, from 31861, U. S. N. M., collected by the steamer Albatross in N. lat. 39-52′, W. lon. 70-30′, at a depth of about 600 fathoms.	55
61.	Bathylagus Benedicti, Goode and Bean.  Drawing by A. II. Baldwin, from a specimen collected by the steamer Albatross at Station 2711, in N. lat. 38 59, W. lon. 70 07, at a depth of 4.314 fathoms.	55
	PLATE XVIII.	
65,	66. Bathysaurus ferox, Günther.  Drawings by H. L. Todd, from a specimen obtained by the steamer Blake at Station CCCNLI, in N. lat. 39   38   20  , W. Ion. 70   56 , at a depth of 1,211 fathoms.	58
157,	68. Ipnops Murrayi, Günther  Drawings by H. L. Todd, from a specimen collected by the steamer <i>Blake</i> at Station CCXXXIII, in N. bat. 21-36, W. lon. 81-05, at a depth of 955 fathoms. (No. 67, three times natural size; No. 68, one and a half times.)	67
(59),	Bathylaco nigricans, Goode and Bean.  Drawing by A. II. Baldwin, from the type specimen collected by the steamer Blake at Station XXXIX, oil Santa Cruz, in 2,393 fathoms.	57
	PLATE XIX.	
70,	Chlorophthalmus Agassizii, Bonaparte.  Drawing by A. H. Baldwin, from a specimen collected by the steamer Albatross at Station 2314, in N. lat. 32 43, W. Ion. 77 51, at a depth of 459 fathoms.	60
71.	Chlorophthalmus chalybeius, Goode.  Drawing by H. L. Todd, from No. 26092, U. S. N. M., collected by the steamer Fish Hawk at Stations 876-878, off Marthas Vineyard, in 120-142½ fathoms. (About one and a half times natural size.)	60

	$ ext{TeV}$	al page
72.	Chlorophthalmus truculentus, Goode and Bean Drawing by M. M. Smith, from the type specimen collected by the steamer <i>Blake</i> at Station Lit, off Barbados, in 218 fathoms.	61
73.	Benthosaurus grallator, Goode and Bean.  Drawing by H. L. Todd, from a specimen collected by the steamer Blake at Station CLXXIV, in N. lat. 24° 23′, W. lon. 84° 23′, at a depth of 1,850 fathous.	
	FLATE XX.	
74.	Bathypterois dubius, Vaillant	61
<b>7</b> 5.	Bathypterois quadrifilis, Günther  Drawing by A. H. Baldwin, from a specimen collected by the steamer Blake at Station xcvm, off St. Vincent.	
76.	Bathypterois longipes, Giinther.  Drawing by M. M. Smith, from No. 35635, U. S. N. M., collected by the steamer Albatross at Station 2225, in N. lat. 36° 05′ 30″, W. lon. 69° 51′ 45″, at a depth of 2,512 fathoms.	
	PLATE XXI.	
77.	Rondeletia bicolor, Goode and Bean.  Drawing by H. L. Todd, from type No. 38202, U. S. N. M., collected by the steamer Albatross at Station 2724, in N. lat. 36° 47′, W. lon. 73° 25′, at a depth of 1,641 fathoms. (Enlarged one-half.)	
78.	Cetomimus Gillii, Goode and Bean.  Drawing by M. M. Smith, from type No. 35529, U. S. N. M., collected by the steamer Albatross at Station 2206, in N. lat. 39° 35′, W. lon. 71° 24′ 30″, at a depth of 1,043 fathoms.	
79.	Cetomimus Storeri, Goode and Bean.  Drawing by M. M. Smith, from type No. 35634, U. S. N. M., collected by the steamer Albatross at Station 2222, in N. lat. 39° 03′ 15″, W. lon. 70° 50′ 45″, at a depth of 1,535 fathoms.	
	PLATE XXII.	
80.	Myctophum punctatum, Rafinesque.  Drawing by H. L. Todd, from No. 23369, U. S. N. M., collected by Capt. Matt. Ryan and crew, Gloucester fishing fleet, on the Grand Bank.	
81.	Myctophum opalinum, Goode and Bean.  Drawing by J. C. Van Hook, from No. 43798, U. S. N. M., collected by the steamer Albatross at Station 2585, in N. lat. 39° 08′ 30″, W. lon. 72° 17′, at a depth of 542 fathoms. (Natural size.)	:
82.	Myctophum Humboldtii, (Risso), Goode and Bean  Drawing by J. C. Van Hook, from No. 43772, U. S. N. M., collected by the steamer Albatross at Station 2727, in N. lat. 36° 35′, W. lon. 74° 03′ 30″, at a depth of 1,239 fathoms.	
83.	Myctophum Benoiti, (Cocco), Goode and Bean.  Drawing by A. H. Baldwin, from a specimen collected at Messina, Italy, by Prof. H. H. Giglioli.	
84.	Myctophum remiger, Goode and Bean.  Drawing by J. C. Van Hook, from type No. 43792, U. S. N. M., collected by the steamer Albatross at Station 2573, in N. lat. 40° 34′ 18″, W. lon. 66° 09′ 00″, at a depth of 1,712 fathoms.	
85.	Benthosema Mülleri, Goode and Beau.  Drawing by Λ. H. Baldwin, from No. 28839, U. S. N. M., collected by the steamer Fish Hawk at Station 953, in N. lat. 39° 52′ 30″, W. lon. 70° 17′ 30″, at a depth of 724 fathoms.	
	PLATE XXIII.	
86.	Lampanyctus crocodilus, (Risso), Goode and Bean.  Drawing by A. H. Baldwin, from a specimen collected at Nice, and obtained through the Royal Zoölogical Museum at Florence, Italy.	
87.	Lampanyctus Gemellarii, (Cocco), Goode and Bean  Drawing by A. H. Baldwin, from No. 44170, U. S. N. M., obtained from Messina by Prot. II. II.  Giglioli, director of the Royal Zoölogical Museum, Florence, Italy.	
88.	Lampanyctus gemmifer, Goode and Bean.  Drawing by A. H. Baldwin, from type No. 35601, U. S. N. M., collected by the steamer Albatross at Station 2201, in N. lat. 39° 39′ 45″, W. lon. 71° 35′ 15″, at a depth of 538 fathoms.	80

	PLATE XXIV.	page.
89.	Drawing by A. H. Baldwin, from type No. 43778, U.S. N. M., collected by the steamer Albatross at Station 2401, in N. lat. 28 38 30 ', W. lon. 85 52' 30 ', at a depth of 142 fathoms.	81
90.	Drawing by A. H. Baldwin, from type No. 43777, U. S. N. M., (Gloucester Donation No. 199), collected by the schooler John Smith, Capt. Peter Johnson, on Georges Bank, in 45 fathoms.	79
91.	Ceratoscopelus maderensis, (Lowe), Goode and Bean.  Drawing by J. C. Van Hook, from No. 43776, U. S. N. M., collected by the steamer Albatross at Station 2528, in N. lat. 41-47′, W. Ion. 65° 37′30″, at a depth of 677 fathoms. (Nearly twice natural size.)	82
92.	Lampanyctus alatus, Goode and Bean.  Drawing by A. H. Baldwin, from type No. 43769, U. S. N. M., collected by the steamer Albatross at Station 2393, in N. lat. 28° 43′, W. lon. 87° 11′ 30″, at a depth of 525 fathoms.	79
93.	Diaphus theta, Eigenmann and Eigenmann.  Drawing by A. H. Baldwin, from the type specimen taken at moderate depth off Point Loma, near San Diego, Cal.	89
	PLATE XXV.	
91.	Notoscopelus resplendens, (Richardson), Goode and Bean	83
95.	Notoscopelus castaneus, Goode and Bean	81
96.	Notoscopelus caudispinosus, (Johnson), Goode and Beau.  Drawing by A. H. Baldwin, from No. 43768, U. S. N. M., collected by the steamer Albatross at Station 2569, in N. lat. 39° 26′, W. lon. 68° 03′ 30″, at a depth of 1,782 fathoms.	. 81
	PLATE XXVI.	
97.	Notoscopelus quercinus, Goode and Bean  Drawing by A. H. Baldwin, from type No. 43789, U. S. N. M., (Gloncester Donation No. 822), collected by Capt. Frank Carroll and crew, of the schooner <i>Polar Wave</i> , off St. Peter's and Banquerenx.	83
98.	Notoscopelus margaritiferus, Goode and Bean  Drawing by A. H. Baldwin, from No. 13774, U. S. N. M., (Gloncester Donation 404), collected by Capt. G. H. Curtis and crew, of the schooner Conductor, in N. lat. 44° 10′, W. lon. 58°, at a depth of 300 fathoms.	84
99.	Lampadena speculigera, Goode and Bean  Drawing by J. C. Van Hook, from type No. 43797, U. S. N. M., collected by the steamer Fish  Hawk at Station 797, off Newport, R. I., at a depth of 16½ fathoms.	85
100.	Collettia Rafinesquei, (Cocco), Goode and Bean  Drawing by H. L. Todd, from No. 33550, U. S. N. M., collected by the steamer Albatross, at  Station 2009, in N. lat. 37° 12′ 20″, W. lon. 69° 39′ 00″, at a depth of 2,949 fathoms.	88
	PLATE XXVII.	
101.	Æthoprora metopoclampa, (Cocco), Goode and Bean.  Drawing by A. H. Baldwin, from a specimen collected by the steamer Albatross at Station, 2127, in N. lat. 19° 45′, W. lon. 75° 04′ 00″, at a depth of 1,639 fathoms; and a specimen from Messina, obtained from Prof. H. H. Giglioli, director of the Royal Zoölogical Museum, Florence, Italy.	86
102.	Althoprora lucida, Goode and Bean.  Drawing by A. H. Baldwin, from No. 44084, U. S. N. M., collected by the steamer Albatross, at Station 2127, in N. lat. 19° 45′, W. Ion. 75° 04′ 00″, at a depth of 1,639 fathoms.	87
103.	Æthoprora effulgens, Goode and Bean  Drawing by A. H. Baldwin, from No. 43770, U. S. N. M., eollected by Capt. Cuddy and erew of the schooner Joseph O., on Brown's Bank.	87

#### PLATE XXVIII.

104.	Rhinoscopelus Coccoi, (Cocco), Goode and Bean  Drawing by J. C. Van Hook, from No. 43822, U. S. N. M., collected by the steamer Albatross, in a towing net, in N. lat. 39°, W. lon. 72°. (About twice natural size.)	110
105.	Tarletonbeania tenua, Eigenmanu and Eigenmann  Drawing by A. H. Baldwin, from No. 41882, U. S. N. M., collected by C. H. Eigenmann, off  Point Loma, near San Diego, Cal.	89
106.	Dasyscopelus asper, (Richardson), Goode and Bean  Copied by A. H. Baldwin, from Richardson, Voyage of the Erebus and Terror, Pl. XXVII, 11g.  105.	92
107.	Electrona Rissoi, (Cocco), Goode and Bean	91
	PLATE XXIX.	
108,	109. Neoscopelus macrolepidotus, Johnson	93
110.	Nannobrachium McDonaldi, Goode and Bean.  Drawing by S. F. Denton, from No. 35445, U. S. N. M., collected by the steamer Albatross, at Station 2182, in N. lat. 39° 25′ 30″, W. lon. 71° 44″, at a depth of 861 fathoms.	91
	PLATE XXX.	
111.	Maurolicus borealis, (Nilsson), Glinther	90
112.	Opisthoproctus soleatus, Vaillant	95
	Ichthyococcus ovatus, (Cocco), Bonaparte Outline from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. x1v, Fig. 2.	95
114.	Cyclothone microdon, (Günther), Goode and Bean  Drawing by H. L. Todd, from No. 29833, U. S. N. M., collected by the steamer Fish Hawk, at  Station 953, off Marthas Vineyard, in N. lat. 39° 52′ 30″, W. lon. 70° 17′ 30″, at a depth of 724 fathoms. (Nearly twice natural size.)	99
	PLATE XXXI.	
115.	Chauliodus Sloanii, Schneider	96
116.	Gonostoma denudatum, Rafinesque.  Drawing from Bonaparte, Fauna Italica, folio 119, Fig. 1.	98
117.	Gonostoma brevidens, Kner and Steindachner	98
	Drawing by H. L. Todd, from No. 33368, U. S. N. M., collected by the steamer Albatross, at Station 2077, in N. lat. 41° 09′ 40″, W. lon. 66° 02′ 20″, at a depth of 1,255 fathoms. (Slightly reduced.)	
118.	Cyclothone bathyphila, (Vaillant), Goode and Bean	100
	PLATE XXXII.	
119.	Cyclothone elongata, (Günther), Goode and Bean  Drawing by A. H. Baldwin, from No. 33291, U. S. N. M., collected by the steamer Albatros., at Station 2039, in N. lat. 38° 19′ 26″, W. lon. 68° 20′ 20″, at a depth of 2,369 fathoms. (Nearly twice natural size.)	101
120.	Bonapartia pedaliota, Goode and Bean.  Drawing by H. L. Todd, from the type specimens, collected by the steamer Albatross, at Station 2642, in N. lat. 25° 20′ 30″, W. lon. 79° 58′, at a depth of 217 fathoms. (Enlarged about one-half.)	102

1.1.1		page.
121.	Yarrella Blackfordii, Goode and Bean.  Drawing by A. H. Baldwin, from type No. 11212, U. S. N. M., collected by the steamer Albatross, at Station 2376, in N. lat. 29 03 45′, W. lon. 88 46′, at a depth of 321 fathoms. (Slightly reduced.	103
122.	Photichthys argenteus, Ilutton.  Drawing from Günther, Chalienger Report, Vol. XXII, Pl. XLV. (About one-half natural size.)	101
	PLATE XXXIII.	
123.	Astronesthes niger, Richardson.  Drawing by A. H. Baldwin, from No. 34538, F. S. N. M., collected by Capt. Field, on a voyage from Mogador to New York, and presented to the National Museum by Mr. E. G. Blackford.	105
121.	Antronesthes gemmifer, Goode and Bean.  Drawing by A. H. Baldwin, from type No. 21645, U. S. N. M., obtained by the schooner <i>Polar Wave</i> from the stomach of a halibut, in N. lat. 41°25, W. lon. 53°12, at a depth of 300 fathoms.	105
125.	Astronesthes Richardsonii, Poey.  Drawing by M. M. Smith, from No. 35510, U. S. N. M., collecte I by the steamer Albatross, at Station 2202, in N. lat. 39° 38° 00°, W. lon. 71° 39° 45°, at a depth of 545 fathoms.	106
	PLATE XXXIV.	
126.	Diplophos tænia, Günther.  Drawing from Günther, Challenger Report, Vol. XXII, Pl. IV (Enlarged nearly five times.)	101
127.	Stomias ferox, Reinhardt.  Drawing by H. L. Todd, from No. 23360, U. S. N. M. (Gloncester donation No. 190), collected by Capt. David Cammel and crew, of the Gloncester fishing fleet, at East Banquerenx (Three-fifths natural size.)	107
	Stomias boa. (Risso), Unvier  Drawing from Unvier and Valenciennes, Histoire Naturelle des Poissons, Vol. XVIII, Pl. 545.	108
129.	Stomias affinis, Günther.  Drawing from Günther, Challenger Report, Vol. XXII. Pl. LIV, Fig. A.	108
	PLATE XXXV.	
130.	Echiostoma barbatum. Lowe  Drawing by S. F. Denton, from No. 35621, U. S. N. M., collected by the steamer Albatross, at Station 2236, in N. lat. 39-11-90, W. lon. 72-08-30, at a depth of 636 fathoms. (Enlarged one-third.)	109
I31.	Echiostoma margarita, Goode and Bean.  Drawing by A. II. Baldwin, from type No. 39282, U. S. N. M., collected by the steamer Albatross, at Station 2391, in N. lat. 28 · 38 · 30°, W. lon. 87 · 02°, at a depth of 420 fathoms.	109
132.	Opostomias micripnus, Günther.  Drawing from Günther, Challenger Report, Vol. XXII, Pl. LIII, Fig. A. (About one-half natural size.)	110
133.	Grammatostomias dentatus, Goode and Bean.  Drawing by H. L. Todd, from type No. 37370, U. S. N. M., collected by the steamer Albatross, at Station 2565, in N. lat. 38-19-20°, W. lon. 69-02° 30°, at a depth of 2,069 fathoms. (Slightly enlarged.)	110
	PLATE XXXVI.	
	Pachystomias microdon Günther.  Outline from Günther, Challenger Report, Vol. XXII, Pl. LIII.  Firstomias absorbes, Vaillant.	111
	Eustomias obscurus, Vaillant. Outline from Vaillant, Expeditions Scientifiques dn Travailleur et dn Talisman, Pl. vni, Fig. 3.	111
136.	Bathophilus nigerrimus, Giglioli. Outline from Giglioli, "Pelagos." (Enlarged one-third.)	111
137.	Photonectes gracilis, Goode and Bean.  Drawing by M. M. Smith, from the type specimen collected by the steamer Blake at Station XZ, off Martinione, in 172 fathoms.	112
	PLATE XXXVII.	
138.	Malacosteus niger, Ayres.  Drawing by H. L. Todd, from No. 32169 U. S. N. M. (Gloncester Donation, No. 797), collected by Capt. Charles Anderson and crew of the schooner Alice G. Wonson, on the northeastern edge of Georges Bank, in 125 fathoms. (Enlarged two-thirds.)	114

	Text page.
139. Malacosteus choristodactylus, Vaillant	11
Drawing from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. (Slightly enlarged.)	VIII.
140. Photostomias Guernei, Collett.	118
Ontline from Lütken, Spolia Atlantica, p. 281. (Three and a half times natural size.)	
111. Thaumatostomias atrox, Alcock	
Drawing from Alcock, Annals and Magazine of Natural History, Vol. v1, Pl. v111, Fig. 7.	
PLATE XXXVIII.	
142. Alepisaurus ferox, Lowe	
Drawing by H. L. Fodd, from No. 20593 U. S. N. M., obtained in a New York market by Blackford.	E. G.
143. Paralepis borealis, (Reinhardt), Jordan and Gilbert  Drawing by H. L. Fodd, from a specimen in the Academy of Natural Sciences, Mont Canada.	
143A. Paralepis coregonoides, Risso	119
Outline from Bonaparte, Fanna Italica, Pl. xxvII.	
144. Sudis hyalina, Ralfinesque.	121
Outline from Bonaparte, Fauna Italiea, Pl. XXVII.  145. Odontostomus hyalinus, Cocco	121
Outline from Günther, Challenger Report, Vol. XXII, Pl. LII, Fig. A.	121
PLATE XXXIX.	
146. Sternoptyx diaphana, Lowe.  Drawing by H. L. Todd, from a specimen obtained by the steamer <i>Blake</i> at Station coexy N. lat. 32° 07′, W. lon. 78° 37′ 30″, at a depth of 229 fathoms.	
146B. Sternoptyx diaphana, Lowe	
N. lat. 33° 19′, W. lon. 76° 12′ 30″, at a depth of 457 fathoms.	,
147. Argyropelecus hemigymnus, Coeeo	
148. 148A. Argyropelecus Olfersii, (Cuvier), Cuvier and Valenciennes	
149. Polyipnus spinosus, Günther.  Drawing by H. L. Todd, from No. 37860 U. S. N. M., collected by the steamer <i>Albatro</i> Station 2393, in N. lat. 28° 43′ 00″, W. lon. 87° 14′ 30″, at a depth of 525 fathoms. (Total natural size.)	ss at
PLATE XL.	
150. Omosudis Lowei, Günther	122
151. Idiacanthus ferox, Günther	129
152. Halosaurus Oweni, Johnson	130
Drawing by A. H. Baldwin, from No. 34418 U. S. N. M., collected by the steamer Albatro station 2181, in N. lat. 39° 29′, W. lon. 71° 46′, at a depth of 693 fathoms.	
153. Halosaurus Johnsonianus, Vaillant	
PLATE XLI.	
154. Aldrovandria rostrata, (Günther), Goode and Bean Drawing from Günther, Challenger Report, Vol. XXII, Pl. LIX.	132
155. 155A. Aldrovandia macrochira, (Giinther), Goode and Bean	
156. Aldrovandia phalacrus, (Vaillant), Goode and Bean  Drawing from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl.	

#### PLATE XLII.

157. Aldrovandia gracilis, Goode and Beauc.	page. 134
Drawing by S. P. Denton, from a specimen collected by the steamer Blake at Station LXX, off (and dupe, at a depth of 769 fathoms. About one-half natural size.)	
Drawing by H. L. Podd, from the type specimen collected by the Steamer <i>Blake</i> at Station crixin, in N. Lit. 21–36, W. Ion. 81–05, at a depth of 955 fathous. (About seven-twelfths matural size.)	135
159. Congermingena flava, Goode and Benc.  Drawing by H. L. Todd, from a specimen collected by the steamer Albatross at Stations 2121 and 2122, between N. lat. 10-37-40. W. lon-61-42-40., and N. lat. 40-37-00. W. lon. 61-44-22., at a depth of 31 to 34 fathouss. (Five-sevenths natural size.)	138
160. Uroconger vicinus, Vaillant	138
PLATE XLIII.	
161. Simenchelys parasitions, Gill	139
Drawing by A. II. Baldwin, from type No. 41103, U. S. N. M., collected by the steamer Albabrass, on the Galapagos Islands.	111
163. Hoplunnis Diomedianus, Goode and Bean Drawing by J. C. Van Hook, from type No. 14210, U. S. N. M., collected by the steamer Alba- tross at Station 2102, in N. lat. 28/36. W. lon. 86/50', at a depth of 111 fathoras.	116
PLATE XLIV.	
164. Synaphobranchus pinnatus, (Gronovius), Günther.  Drawing by H. L. Todd, from No. 21681, U. S. N. M., collected by Capt. Olsen, of the Gloncester tishing fleet, on Le Have Bank. (Three-fifths natural size.)	143
165. Histiobranchus infernalis, Gill	145
166. Pisoodonophis cruentifer, Goode and Bean. Drawing by A. H. Baldwin, from No. 28938. IV.S. N. M., collected by the steamer Fish Hawk at Station 1035, in N. lat. 39° 57, W. lon. 69° 28′, at a depth of 120 fathous. (Slightly reduced.)	117
167. Myrus pachyrhynchus, Vaillaut.  Drawing from Vaillaut, Expeditious Scientifiques du Travailleur et du Talismau, Pl. v, Fig. 1.  (About one-half natural size.)	118
Drawing by H. L. Todd, from a specimen collected by the <i>Blake</i> at Station Cutt, in N. Iat. 16 43 45 , W. Iou, 62 \(^16\) 16' 12', at a depth of 303 fathoms. (Seven-twelfths natural size.)	149
169, 169 V. B. Derichthys serpentinns, Gill.  Drawings by H. L. Todd, from type No. 33523, U. S. N. M., collected by the steamer Albatross, at station 2091, in N. lat. 39 117 307, W. lon. 719 017, at a depth of 1.022 fathoms.	161
PLATE XLVI.	
170. Nemichthys scolopaceus, Richardson.  Drawing by H. L. Todd, from a specimen collected by William Parsons, on East Georges Bank.	152
171. Labichthys carinatus, Gill and Ryder.  Drawing by A. H. Baldwin, from type No. 33369, U. S. N. M., collected by the stemmer Albatro s. it stition 2075, in N. lat. 11-13, W. lon. 65 133-30, at a depth of 906 fathous. (Slightly reduced.)	153
172. Labichthys clongatus, Gill and Ryder.  Drowing by A. H. Baldwin, from type No. 33577, U. S. N. M., collected by the steamer Albatross, at station 2100, in N. lat. 39° 22, W. lon. 68° 34′ 30″, at a depth of 1,628 fathoms.	153

# PLATE XLVII.

	Tex	t page.
	Labichthys infans, (Günther), Goode and Bean.  Drawing by A. H. Baldwin, from type No. 44239, U. S. N. M, collected by the steemer Albatross, at station 2859, in N. lat. 55° 20′, W. lon. 136 20′, at a depth of 1,569 fathous. (About one-half natural size.)	153
174.	Labichthys infans (after Giinther)  Outline from Giinther, Challenger Report, Vol. XXII, Pl. LXIII.	154
<b>17</b> 5.	Serrivomer Beanii, Gill and Ryder  Drawing by A. H. Baldwin, from No. 33383, U. S. N. M., collected by the steamer Albatross, at station 2075, in N. lat. 41° 40′ 30″, W. lon. 65° 28′ 30″, at a depth of 855 fathoms. (About one and two-thirds natural size.)	155
	PLATE XLVIII.	
176.	Cyema atrum, Günther  Drawing from Günther, Challenger Report, Vol. XXII, Pl. LIV, Fig. D. (About natural size.)	154
177.	Eurypharynx pelecanoides, Vaillant  Drawing from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XVII.  (About onc-half natural size.)	159
178.	Saccopharynx flagellum, Mitchill Drawing from Giïuther, Challenger Report, Vol. XXII, Pl. LXVI. (Enlarged about one-half.)	157
	PLATE XLIX.	
179,	180. Saccopharynx flagellum, Mitchill  Drawings by H. L. Todd, from No. 37988, U. S. N. M., collected by the steamer Albatross, at station 2717, in N. lat. 38° 24′, W. lon. 71° 13′, at a depth of 1,615 fathoms. (No. 179, one-third natural size; No. 180, one-half.)	157
181,	182. Gastrostomus Bairdīi, Gill and Ryder	159
	PLATE L.	
183.	Notacanthus nasus, Bloch	164
184.	Notacanthus analis, Gill.  Drawing by H. L. Todd, from type No. 37856, U. S. N. M., collected by the steamer <i>Albatross</i> , at station 2677, in N. lat. 32° 39′, W. lon. 76° 50′ 30″, at a depth of 478 fathoms. (About one-half natural size.)	165
185.	Notacanthus Bonapartii, Risso	166
186.	Notacanthus phasganorus, Goode.  Drawing by H. L. Todd, from type No. 25972, U. S. N. M., collected by Capt. Briggs Gilpatrick. of the schooner <i>Gatherer</i> , from the stomach of a Ground-shark, on the Grand Bank of Newfoundland. (One-fourth natural size.)	167
	PLATE LI.	
187.	Gigliolia Moseleyi, Goode and Bean	169
	Polyacanthonotus Rissoanus (De Filippi and Verany), Günther	170
189.	Macdonaldia rostrata, (Collett), Goode and Bean.  Drawing by M. M. Smith, from type No. 35601, U.S. N. M., collected by the steamer Albatross, at station 2216, in N. lat. 39° 47′, W. lon. 70° 30′ 30′′, at a depth of 963 fathoms.	171
190.	Drawing by H. L. Todd, from No. 39212, U. S. N. M., collected by the steamer Albatross, at station 2742, in N. lat. 37° 46′ 30″, W. lon 73° 56′ 30″, at a depth of 865 fathoms. (About one-half natural size.)	173

# PLATE LIL

1ext j	page
191A. B. Notacanthus analis, Gill.  Drawings by A. H. Baldwin, from No. 37856, U. S. N. M., collected by the steamer Albatross, at station 2677, in N. Lat. 32 - 39 ; W. Ion. 76 - 50 - 30", at a depth of 178 fathous.	163
192A, B. Notacanthus sexspinis, Richardson Drawings from Günther, Challenger Report, Vol. XXII, Pl. 1XI, Fig. a.	16;
195. Gigliolia Moseleyi, Goode and Bean.  Drawing from Günther, Challenger Report, Vol. XXII, Pl. LXI, Fig. C.	168
191A, B. Polyacanthonotus Rissoanus, De Filippi and Verany), Günther	170
195A. B. Macdoualdia rostrata. Collett, Goode and Bean.  Drawings by A. H. Baldwin, from Nos. 35601-2, 1', S. N. M., collected by the steamer Albatross, at station 2216, in N. lat. 39-47, W. lon. 70-30-30, at a depth of 963 fathous.	17
196A, B. Lipogenys Gillii, Goode and Beau.  Drawings by A. H. Baldwin, from No. 39212, V. S. N. M., collected by the steamer Albatross, at station 2712, in N. lat. 37-46-30-, W. lon. 73-56-30-, at a depth of 865 fathous.	173
PLATE LIII.	
197. Beryx splendens, Lowe  Drawing by M. M. Smith, from a specimen collected by the steamer Albatross, at station 2415, in N. lat. 30 - 41. W. lon. 79 - 26., at a depth of 110 fathoms.	17
198. Melamphaes typhlops, (Lowe), Günther	17
199. Scopelogadus cocles, Vaillant	18
200. Poromitra capito, Goode and Bean.  Drawing by H. L. Todd, from a specimen collected by the steamer <i>Blake</i> , at station cccxxvm, in N. lat. 31 ° 28 ° 45 ′, W. lon. 75 ° 22° 50 ′, at a depth of 1,632 fathous. (Two and two-sevenths natural size.)	18
200A. Plectromus crassiceps, (Gainther), Goode and Bean. Drawing from Giinther, Challenger Report, Vol. xxii, Pl. viii, Fig. B.	18
PLATE LIV.	
204. Plectromus suborbitalis, Gill.  Drawing by H. L. Todd, from type No. 33271, U. S. N. M., collected by the steamer Albatross, at stition 2036, in N. lat. 38 - 52 - 10 , W. lon. 69 - 21 - 10 , at a depth of 1,735 fathoms. (One and three-fifths natural size.)	17
202. Plectromus Beanii, (Günther). Goode and Bean.  Drawing by S. F. Denfon, from No. 33378, U. S. N. M., collected by the steamer Albatross, at station 2075, in N. lat. 11 10 30 , W. lon. 65 35 , at a depth of 855 fathoms.	17
203. Anoplogaster cornutus, (Cuvier and Valenciennes), Günther.  Drawing by H. L. Todd, from No. 33559, U. S. N. M., collected by the steamer Albatross, at station 2101, in N. lat. 39-18-30, W. lon. 68-21, at a depth of 1,686 fathoms.	18
PLATE LV.	
204, 201 V. Caulolepis longidens. Gill.  Drawings by H. L. Todd, from No. 33270, U. S. N. M., collected by the steamer Albatross at station 2031, in N. lat. 39 - 27 - 10 , W. lon. 69 - 56 - 20 , at a depth of 1,316 fathoms.	18
Drawing by H. L. Todd, from No. 33115 H. S. N. M., collected by the steamer Albatross at station 2077, in N. lat. 40 - 09 40 , W. lon. 66 - 02 20 ', at a depth of 1,255 fathoms. (About three times natural size.)	18
PLATE LVI.	
206. Stephanoberyx Gillii, Goode and Bean.  Drawing by H. L. Todd, from type No. 33555, F. S. N. M., collected by the steamer Albatross at station 2009, in N. lat. 37 - 12 - 20°, W. lon. 69 - 39 - 00°, at a depth of 2,930 fathoms	18

		page
207.	Trachichthys Darwinnii, Johnson.  Drawing from Steindachner and Dæderloin, Denkschrift d. k. Akademic d. Wissenschaften Vol. XLVII, Pl. II.	188
208.	Hoplostethus mediterraneus, Cuvier and Valenciennes.  Drawing by A. H. Baldwin, from No. 43624, U. S. N. M., collected by the steamer Albatross at station 2659, in N. lat. 28° 32′, W. lon. 78° 42′, at a depth of 509 fathoms.	189
	PLATE LVII.	
209.	Thyrsitops violaceus, Bean  Drawing by S. F. Denton, from type No. 39287, U. S. N. M., collected by Capt. Thomas Thompson, of the Gloucester fishing fleet, on Le Have Bank, at a depth of 125 fathoms. (One-seventh natural size.)	195
210.	Ruvettus pretiosus, Cocco	196
211.	Epinnula magistralis, Poey	198
212.	Dicrotus parvipinnis, Goode and Bean.  Drawing by H. L. Todd, from the type specimen, collected by the steamer Albatross at station 2601, off Cape Hatteras, in N. lat. 34° 39′ 15″, W. lon. 75° 33′ 30″, at a depth of 107 fathoms.	201
	PLATE LVIII.	
213.	Lepidopus caudatus, (Euphrasen), White	203
214.	Evoxymetopon tæniatus, Poey.  Drawing by H. L. Todd, from No. 5735, U. S. N. M., collected by Prof. Félipe Poey at Havana, Cuba. (About two-ninths natural size.)	204
215.	Benthodesmus atlanticus, Goode and Bean  Drawing by H. L. Todd, from typo No. 29116, U. S. N. M., taken from the stomach of a halibut, by Capt. R. Morrison, of the schooner <i>Laura Nelson</i> , on the west edge of the Grand Bank of Newfoundland, in 80 fathoms. (About one-third natural size.)	205
	PLATE LIX.	
216.	Aphanopus carbo, Lowe	207
217.	Trichiurus lepturus, Linnæus  Drawing by H. L. Todd, from No. 18028, U. S. N. M., collected by Dr. Janeway, U. S. Navy, at St. Augustine, Fla.	208
218.	Pteraclis carolinus, Cuvier and Valenciennes	212
	PLATE LX.	
219.	Coryphæna hipgurus, Linnæus (old male) Drawing by H. L. Todd, from No. 16482, U. S. N. M., obtained in Fulton Market, New York City, by E. G. Blackford.	209
220.	Coryphæna hippurus, Linnæus (young)	209
220.	A, B. Coryphæna hippurus, Linnæus	209
	PLATE LXI.	
221.	Grammicolepis brachiusculus, Poey	218

		page.
13-3-3	Centrolophus pompilus, (Gmelin), Cuvier and Valenciennes.  Drawing by S. F. Denton, from a specimen obtained at Dennis, Mass., by Vinal N. Edwards.  About two-thirds natural size.)	211
223.	Schedophilus medusophagus, Cocco	211
	PLATE LXH.	
221.	Icosteus enigmaticus, Lockington	215
225.	Acrotus Willoughbyi, Bean	217
226.	Icichthys Lockingtonii, Jordan aml Gilbert  Drawing by A. H. Baldwin, from No. 27397, U. S. N. M., collected off the coast of Washington. (Slightly reduced.)	216
	PLATE LXIII.	
227.	Nomeus Gronovii, (Gmelin), Giinther  Drawing by H. L. Todd, from a specimen collected by the steamer Albatross at station 2617, in N. lat. 25-48-00, W. lon. 80-04-00, at a depth of 85 fathoms. (Enlarged one-third.)	220
225.	Psenes pellucidus, Liitken.  Drawing by M. M. Smith, from No. 35415, 17.8, N. M., collected by the steamer Albatross at station 2471, in N. lat. 37 - 59 30°, W. lon. 73 - 48 40°, at a depth of 444 fathoms.	221
229,	Psenes maculatus, Liitken.  Drawing by H. L. Todd, from No. 39329, U. S. N. M., collected by the steamer Albatross at station 2628, in N. lat. 32-21, W. lon. 76-55-30, at a depth of 528 fathoms. (Nearly twice natural size.)	221
	PLATE LXIV.	
230.	Luvarus imperialis, Rafinesque	222
231.	Glossamia pandionis, Goode and Bean.  Drawn by H. L. Todd, from type No. 26628, U. S. N. M., collected by the steamer <i>Fish Hawk</i> at station 897, in N. lat. 37°25°, W. lon. 71°18°, at a depth of 4574° fathous. (Enlarged about one-fourth.)	
232.	Verilus sordidus, Poey  Drawing by A. H. Baldwin, from No. 42565, 1', S. N. M., collected by Prof. Félipe Poey, off Cuba. (Slightly less than one-half natural size.)	210
	PLATE LXV.	
233,	233A, B. Cyttus hololepis, Goode and Bean.  Drawings by H. L. Todd, from type No. 39296, V.S.N.M., collected by the steamer Albatross at station 2358, in N. lat. 20 - 19, W. lon. 87 - 03 - 30%, at a depth of 220 fathoms. (Enlarged nearly one-half.)	
234.	Diretmus argenteus, Johnson	211
235,	Drawing from Johnson, Proceedings of the Zoölogical Society of London, Pl. xxxvi.  Antigonia capros, Lowe.  Drawings from Temminck and Schlegel, Fauna Japonica, Pl. xxx.	229
	PLATE LXVI.	
236.	Epigonus occidentalis, Goode and Bean.  Drawing by H. L. Todd, from the type specimen, collected by the steamer Blake at station any, off Barbadoes, in 237 fathoms. (Natural size.)	
237.	Drawing by S. F. Denton, from No. 39338, U. S. N. M., collected by the steamer Albatross at station 2126, in N. lat. 36 - 01 - 30 , W. lon. 74° 17′ 30″, at a depth of 93 fathous. (About one and two-thirds natural size.)	;
235.	Polyprion americanum, (Schneider), Jordan  Drawing by H. L. Todd, from a specimen collected by the U. S. Fish Commission, on the Grand Bank.	

Text	144.24
239, 240. Pseudopriacanthus altus, Gill  Drawings by H. L. Todd, from a specimen collected by the steamer Albatross at station 2606, in N. lat. 34° 35′ 15″, W. lon, 75° 52′ 00″, at a depth of 25 fathoms. (No. 239, eight times natural size; No. 240, four times.)  PLATE LXVII.	212
241. Polymixia nobilis, Lowe	243
	0.10
242. Scorpæna cristulata, Goode and Bean  Drawing by H. L. Todd, from type No. 39326, U. S. N. M., collected by the steamer Albatross at station 2415, in N. lat. 30° 44′, W, lon. 79° 26, at a depth of 440 fathoms.	246
243. Scorpæna Agassizii, Goode and Bean.  Drawing by M. M. Smith, from the type specimen collected by the steamer Blake at station cellux, in N. lat. 23° 13′, W. lon. 74° 52′, at a depth of 80 fathoms.	217
PLATE LXVIII.	
211 Holicolanus madaransis Coods and Roan	0=0
244. Helicolenus maderensis, Goode and Bean.  Drawing by H. L. Todd, from No. 26627, U. S. N. M., collected by the steamer Fish Hawk at station 897, in N. lat. 37° 25′, W. lon. 74° 18′, at a depth of 157½ fathoms. (Slightly reduced.)	250
245. Pontinus Rathbuni, Goode and Bean  Drawing by A. H. Baldwin, from No. 39526, U. S. N. M., collected by the steamer Albatross at station 2298, in N. lat. 35° 39′, W. lon. 74° 52′, at a depth of 80 fathoms.	255
246. Pontinus longispinis, Goode and Bean.  Drawing by H. L. Todd, from type No. 39322, U. S. N. M., collected by the steamer Albatross at station 2402, in N. lat. 28° 36′, W. lon. 85° 33′ 30″, at a depth of 111 fathoms.	258
PLATE LXIX.	
247. Pontinus macrolepis, Goode and Bean.  Drawing by A. H. Baldwin, from a specimen collected by the steamer <i>Blake</i> at station civ, off Barbadoes, at a depth of 500 fathoms.	257
248. Sebastes marinus, (Linnæus), White	260
PLATE LXX.	
249. Setarches parmatus, Goode	264
Drawing by H. L. Todd, from type No. 26084, U. S. N. M., collected by the steamer Fish Hawk at station 876, off Martha's Vineyard, in N. lat. 39° 57′ 00″, W. lon. 70° 56′ 00″, at a depth of 120 fathoms. (Twice natural size.)	
250. Eumicrotremus spinosus, (Müller), Gill	272
Drawing by H. L. Todd, from a specimen collected off Half Way Rock, Salem, Mass., at a depth of 35 fathoms. (About three times natural size.)	
251, 251A, B. Careproctus ranula, Goode and Bean	275
Drawings by H. L. Todd, from No. 22310, U. S. N. M., collected by the steamer <i>Speedwell</i> at station 117, off the mouth of Halifax Harbor. (Little less than twice natural size.)	
252. Monomitra liparina, Goode  Drawn by H. L. Todd, from type No. 26184, U. S. N. M., collected by the steamer Fish Hawk at station 891, in N. lat. 39° 46′, W. lon. 71° 10′, at a depth of 480 fathoms.	278
PLATE LXXI.	
253. Paraliparis Copei, Goode and Bean.	279
drawing by H. L. Todd, from No. 35637, U. S. N. M., collected by the steamer <i>Albatross</i> at station 2232, in N. lat. 39° 12′ 17′′, W. lon. 72° 09′ 30″, at a depth of 520 fathoms. (Slightly reduced.)	
254. <b>Gymnolycodes Edwardsi</b> , Vaillant.  Drawing from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XXVI.	281
255. Artediellus uncinatus, (Reinhardt), Jordan	267
Drawing by A. H. Baldwin, from a specimen collected by the steamer Albatross at station 2177, in N. lat. 44° 29′ 30″, W. lon. 57° 11′ 15″, at a depth of 114 fathoms. (About two-and-a-half times natural size.)	_~.

	Text	page.
2011	Triglops Pingelii, Reinhardt.  Drawing by H. L. Todd, from a specimen collected by the steamer Speedwell at station 117, 8 miles off Chebucto, at a depth of 52 fathous. (Unlarged about one-half.)	260
	PLATE LXXII.	
257.	Cottunculus microps, Collett.  Drawing by H. L. Todd, from No. 26087, F. S. N. M., collected by the steamer Tish Hawk at station 880, in N. lat. 38 - 18 - 30 , W. Ion. 70 - 54, at a depth of 2524 fathoms. (Natural size.)	269
258. (	Cottunculus Thomsonii, Giinther.  Drawing by H. L. Todd, from No. 37386, U.S. N.M., collected by the steamer Albatross at station 2581, in N. 1at, 39-05-30-, W. Ion, 72-23°20′, at a depth of 541 fathoms. (Seven-twelfths natural size.)	270
259.	Podothecus decagonus, (Schneider), Jordan	282
260.	Aspidophoroides monopterygius, (Bloch), Goode and Beau.  Drawing by H. L. Todd, from No. 21761, U. S. N. M., collected by the steamer Spectwell at Sandwich Point, Halifax, in 18 fathous. (Enlarged about one-half.)	287
	PLATE LXXIII.	
261A.	B. Cottunculus microps, Collett  Drawing by H. L. Todd, from No. 26087, U. S. N. M., collected by the steamer Fish Hawk at station 880, in N. lat. 38 48 30 , W. lon. 70 54 , at a depth of 252 j fathous. (Natural size.)	261
262A,	B. Cottunculus Thomsonii, Giinther.  Drawings by H. L. Todd, from No. 37386, I'. S. N. M., collected by the steamer Albatross at station 2584, in N. lat. 39 05 30 , W. lon. 72 23 20 , at a depth of 511 fathoms. (Natural size.)	27(
	PLATE EXXIV.	
263, 2	263A, B. Hypsicometes gobioides, Goode  Drawings by A. II. Baldwin, from a specimen collected by the steamer Albatross at station 2377, in N. lat. 29 07 30 , W. lon. 88 08 , at a depth of 240 fathoms.	290
264, 2	261A. Chiasmodon niger, Johnson.  Drawings by H. L. Todd, from No. 25633, U. S. N. M., collected at the surface by Capt. Thomas F. Hodgdon of the schooner <i>Bessie W. Somes</i> , on Le Have Bank.	202
	PLATE LXXV.	
265. ]	Lopholatilus chamæleonticeps, Goode and Bean.  Drawing by 11, L. Todd, from No. 22899, 17, S. N. M., collected by Capt. Kirby, 80 miles south by east of No Man's Land.	281
	PLATE LXXVI.	
266. 1	Psendoscopelus scriptus, Lütken	292
267. 1	Porichthys porosissimus, (Cuvier and Valenciennes), tfünther	291
268, 2	68A, B. Callionymus himantophorus, Goode and Bean	296
	PLATE LXXVII.	
269	Anarrhichas lupus, Linnaeus.  Drawing by H. L. Todd, from No. 21816, U. S. N. M., collected by Capt. John Gourville, of the Gloucester fishing fleet, on Georges Bank.	299
270.	Anarrhichas minor, Olafsen	301

Text I	page.
271. Anarrhichas latifrons, Steenstrup and Hallgrimsson  Drawing by H. L. Todd, from No. 21373, U. S. N. M., collected by Capt. Joseph W. Collins, of the sehooner <i>Marion</i> , in N. lat. 43° 56′, W. lon. 59° 04′. (About one-fourth natural size.)	301
PLATE LXXVIII.	
272. Lycodes Esmarkii, Collett  Drawing by H. L. Todd, from No. 21991, U. S. N. M., collected by Capt. Z. Hawkins and crew, of the schooner <i>Gwendolen</i> , on Le Have Bank, in 400 fathoms. (About two-sevenths natural size.)	303
273. Lycodes reticulatus, Reinhardt	305
274. Lycodes frigidus, Collett  Drawing by H. L. Todd, from No. 32995, U. S. N. M., collected by the steamer Albatross at station 2018, in N. lat. 37° 12′ 22″, W. lon. 74° 20′ 04″, at a depth of 788 fathoms. (About two-fifths natural size.)	305
275. Lycodes mucosus, Richardson  Drawing by H. L. Todd, from No. 16930, U.S. N. M., collected in Cumberland Gulf, by W. A.  Mintzer. (About two-fifths natural size.)	306
PLATE LXXIX.	
276. Lycodes zoarchus, Goode and Bean	30 <b>8</b>
276A. Lycodes zoarchus, Goode and Bean.  Drawing by S. F. Denton, from No. 39299, U.S. N. M., collected by the steamer <i>Albatross</i> at station 2486, in N. lat. 44° 26′, W. lon. 57° 11′ 15″, at a depth of 190 fathoms.	308
277, 277A. Lycenchelys Verrillii, Goode and Bean  Drawings by H. L. Todd, from No. 21015, U. S. N. M., eollected by the U. S. Fish Commission, 27 miles southwest of Chebucto.	309
PLATE LXXX.	
278. Lycodes perspicillum, Kröyer	307
278A. Lycodes perspicillum, Kröyer	307
279. Lycenchelys paxillus, Goode and Bean	311
279A. Lycenchelys paxillus, Goode and Bean	311
280. Lycodonus mirabilis, Goode and Bean.  Drawing by S. F. Denton, from No. 39207, U. S. N. M., collected by the steamer <i>Albatross</i> at station 2742, in N. lat. 37° 46′ 30″, W. lon. 73° 56′ 30″, at a depth of 865 fathoms.	312
PLATE LXXXI.	
281A, B. Lycodes reticulatus, Reinhardt  Drawing by H. L. Todd, from a specimen collected by Capt. R. Markuson, southwest of Banquereux, in 300 fathoms. (One-half natural size.)	305
282. Lycenchelys paxillus, Goode and Bean.  Drawing by H. L. Todd, from No. 22177, U. S. N. M., collected by Capt. Joseph W. Collins of the Gloucester fishing fleet, in N. lat. 42° 48′, W. lon. 63° 07′. (Natural size.)	311

	page.
283A. B. Lycodes mucosus, Richardson	306
283C. Lycodes zoarchus, Goode and Bean.  Drawing by H. L. Todd, from type No. 39298, U. S. N. M., collected by the steamer Albatross, off Nova Scotia, in N. lat. 41-46' 30', W. lon. 59-55' 45-, at a depth of 130 fathoms.	308
PLATE LXXXII.	
284. Melanostigma gelatinosum, Günther.  Drawing by H. L. Todd, from No. 28853, P. S. N. M., collected by the steamer Fish Hawk at station 952, in N. lat. 39° 55′, W. Ion. 70° 28°, at a depth of 396 fathoms. (Enlarged one-half.)	314
285. Dicromita Agassizil, Goodo and Bean	319
285A, B. Dicromita Agassizii, Goode and Bean	319
286. Bassozetus catena, Goode and Bean.  Drawing by S. F. Denton, from type No. 37341, U. S. N. M., collected by the steamer Albatross at station 2379, in N. lat. 28° 00′ 15 ′, W. lou. 87° 42°, at a depth of 1,467 fathous. (About seven-ninths natural size.)	323
Drawing by H. L. Todd, from No. 49416, U. S. N. M., collected by the steamer Albatross at station 2380, in N. lat. 28° 02′ 30″, W. lon. 87° 43° 45″, at a depth of 1,430 fathous. (About seven-tenths natural size.)	322
288. Benthocometes robustus, Goode and Bean.  Drawing by 11. L. Todd, from No. 29057, U.S. N.M., collected by the steamer Fish Hawk at station 1043, in N. lat. 38° 39′, W. lou. 73° 11′, at a depth of 130 fathoms. (One and three-fifths natural size.)	327
PLATE LXXXIII.	
289. Neobythites Gilli, Goode and Bean.  Drawing by A. H. Baldwin, from type No. 37340, U. S. N. M., collected by the steamer . Albatross at station 2402, in N. lat. 285 36', W. lon. 85 33', at a depth of 111 fathoms. (About twice natural size.)	325
290. Neobythites marginatus, Goode and Bean	326
291. Bassogigas Gillii, Goode and Bean.  Drawing by A. H. Baldwin, from No. 39147, U. S. N. M., collected by the steamer Albatross at station 2684, off Cape Henlopen, Delaware, in N. lat. 39° 35′, W. lon. 70° 54′, at a depth of 1,106 fathoms. (Slightly more than one-third natural size.)	328
292. Porogadus miles, Goode and Bean  Drawing by A. H. Baldwin, from type No. 35625, U. S. N. M., collected by the steamer  Albatross at station 2230, in N. lat. 38 27', W. lon. 73° 02', at a depth of 1,168 fathoms.  (Enlarged about one-half.)	334
PLATE LXXXIV.	
293. Penopus Macdonaldi, Goode and Bean  Drawing by S. F. Denton, from type No. 39433, U. S. N. M., collected by the steamer Albatross at Station 2716, in N. lat. 387 29' 30'', W. lon. 707 57', at a depth of 1,631 fathoms.	336
294. Barathrodemus manatinus, Goode and Bean.  Drawing by H. L. Todd, from the type specimen collected by the steamer Blake at station cccxxv, in N. lat. 33° 35′ 20″, W. lon. 76°, at a depth of 617 fathoms. (Slightly enlarged.)	332

295. Nematonus pectoralis, (Goode and Bean), Günther.  Drawing by S. F. Denton, from type No. 37342, U.S. N. M., collected by the steamer Albatross at station 2380, in N. lat. 28° 02′ 30″, W. lon. 87° 43′ 45″, at a depth of 1,430 fathoms. (Slightly reduced.)	333
296A. Mixonus laticeps, Günther  Drawing from Günther, Challenger Report, Vol. XXII, Pl. XXV, Fig. B. (Five and a half times natural size.)	339
296B. Tauredophidium Hextii, Alcock	336
PLATE LXXXV.	
297, 297A, B. Dicrolene intronigra, Goode and Bean	338
298. Barathronus bicolor, Goode and Bean  Drawing by M. M. Smith, from the type specimen collected by the steamer <i>Blake</i> , at station LXXI, off Guadeloupe, in 769 fathoms.	341
299. Aphyonis mollis, Goode and Bean  Drawing by H. L. Todd, from the type specimen, collected by the steamer Blake at station ccxxi, in N. lat. 24° 36′, W. lon. 84° 05′, at a depth of 955 fathoms.	342
PLATE LXXXVI.	
300. Alexeterion parfaiti, Vaillant	343
301. Hephthocara simum, Alcock	344
302. Lamprogrammus niger, Alcock	344
303. Rhodichthys regina, Collett	342
PLATE LXXXVII.	
304. Ptilichthys Goodei, Bean	302
305. Otophidium omostigma, Jordan	345
306. Leptophidium cervinum, Goode and Bean	346
307. Leptophidium profundorum, Gill	347
308. Leptophidium marmoratum, Goode and Bean.  Drawing by M. M. Hildebrant, from type No. 37237, U. S. N. M., collected by the steamer Albatross, at station 2350, in N. lat. 23° 10′ 39″, W. lon. 82° 20′ 21″, at a depth of 213 fathoms. (Slightly reduced.)	348
PLATE LXXXVIII.	
309. Phycis regius, (Walbaum), Jordan and Gilbert	357

	page.
310. Phycis cirratus, Goode and Bean  Drawing by 11. L. Todd, from type No. 39059, U. S. N. M., collected by the steamer Albatross, at station 2376, in N. lat. 29 03 15 ', W. Ion. 88° 16', at a depth of 324 fathoms.	358
311. Phycis chuss, Walbaum), Gill.  Drawing by 11. L. Todd, from No. 28707, U. S. N. M., collected by the steamer Fish Hawk, at station 918, in N. lat. 10° 20′ 24′, W. lon. 70° 41′ 30″, at a depth of 215 fathom z	359
PLATE LXXXIX.	
312. Phycis tennis, (Mitchill), De Kay  Drawing by H. L. Todd, from No. 21029, U. S. N. M., collected by the steamer Speedwell, at stations 73 and 71, in Halifax Harbor.	359
Drawing by H. L. Todd, from No. 21840, U. S. N. M., collected by the steamer Speedwell, at station 174, off Cape Ann, in 110 fathoms. (About two-thirds natural size.)	360
314. Aprion macrophthalmus, (Müller), Jordan and Swain.  Drawing by M. M. Smith, from a specimen collected by the steamer Blake, at station CCLXI, in N. lat. 23° 13′, W. lon. 89° 10′, at a depth of 84 fathoms.	239
PLATE XC.	
315. Læmonema barbatu!a, Goode and Bean.  Drawing by W. S. Haines, from No. 38331, U. S. N. M., collected by the steamer Albatross, at station 2397, in N. lat. 28/42', W. lon. 86° 36', at a depth of 280 fathoms.	362
315A. Læmonema barbatula, Goode and Bean.  Drawing by H. L. Todd, from No. 29016, U. S. N. M., collected by the steamer Fish Hawk, at station 1015, in N. lat. 38° 35′, W. lon. 73° 13′, at a depth of 312 fathoms.	362
316. Læmonema melanurum, Goode and Bean  Drawing by W. S. Haines, from type No. 38270, U. S. N. M., collected by the steamer Albatross at station 2115, in N. lat. 30° 41′, W. lon. 79° 26′, at a depth of 410 fathoms.	363
317. Molva vulgaris, Fleming. Outline from Day, Fishes of Great Britain and Ireland, Pl. LXXXVI.	364
PLATE XC1.	
318. Physiculus Kaupi, Poey Outline from Günther, Challenger Report, Vol. XXII, Pl. XVII.	366
319. Physiculus fulvus, Bean.  Drawing by H. L. Todd, from type No. 28766, U.S. N. M., collected by the steamer Fish Hawk, at station 911, in N. lat. 40° 01′, W. Ion. 69 - 56′, at a depth of 59 fathous.	366
320. Uraleptus Maraldi (Risso), Costa  Drawing by 11. L. Todd, from a specimen collected by the steamer Blake, at station LXXXI, off Neris. (Nearly twice natural size.)	367
PLATE XCII.	
321. Lotella maxillaris, Bean.  Drawing by 11. L. Todd, from type No. 29832, U.S. N.M., collected by the steamer Fish Hawk, at station 952, in N. lat. 39 (55), W. Ion. 70° 28', at a depth of 396 falloons. (Nearly three times natural size.)	368
322. Mora mediterranea, Risso	369
323. Lepidion Rissoi, Swainson. Outline from Vinciguerra, Ann. Mns. Civ. Genoa, Vol. xvIII, Pl. III.	370
PLATE XCIH.	
324. Antimora viola (Goode and Bean), Jordan.  Drawing by H. L. Todd, from type No. 21837, U. S. N.M., collected by Capt. Joseph W. Collins, of the schooner <i>Marion</i> , on the edge of Le Have Bank. (Three-eighths natural size.)	372

		page.
325,	Halargyreus brevipes, Vaillant.  Drawing from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. xxv.  (About one-third natural size.)	375
326.	Strinsia tinca, Rafinesque Outline from Bonaparte, Fauna Italica, Vol. III, Pl. 107.	380
	PLATE XCIV.	
327.	Onos ensis, (Reinhardt), Gill	381
328.	Rhinonemus cimbrius, (Linnæus), Goode and Bean.  Drawing by H. L. Todd, from No. 2,721 U. S. N. M., collected in Chaleur Bay, by Edward Brown. (About three times natural size.)	384
329.	Brosmius brosme, (Müller), Günther  Drawing by H. L. Todd, from No. 29967, U. S. N. M., obtained in a Boston market, by W. A. Wileox.	385
	PLATE XCV.	
330.	Merlucius bilinearis, (Mitchill), Gill  Drawing by H. L. Todd, from No. 21016, U. S. N. M., obtained by the U. S. Fish Commission in a Halifax market.	386
331.	Bregmaceros atlanticus, Goode and Bean	388
332,	333. Cœlorhynchus occa, Goode and Bean	400
	PLATE XCVI.	
334.	Macrurus berglax, Lacépède	391
335.	Macrurus Bairdii, Goode and Bean	393
336.	Cælorhynchus carminatus, Goode  Drawing by H. L. Todd, from No. 26187, U. S. N. M., collected by the steamer Fish Hawk, at station 893, off Marthas Vineyard, in 372 fathoms. (Seven-twelfths natural size.)	398
337.	Cœlorhynchus occa, Goode and Bean  Drawing by H. L. Todd, from type No. 37334, U. S. N. M., collected by the steamer Albatross, at station 2396, in N. lat. 28° 34′, W. lon. 86° 48′, at a depth of 335 fathoms. (Seven-twelfths natural size.)	400
	PLATE XCVII.	
338.	Cœlorhynchus caribbæus, Goode and Bean	401
339.	Coryphænoides carapinus, Goode and Bean.  Drawing by H. L. Todd, from a specimen collected by the steamer <i>Blake</i> , at station CCXLII, in N. lat. 39° 43′, W. lon. 70° 55′ 25″, at a depth of 1,002 fathoms.	404
340.	Hymenocephalus Goodei, (Günther), Bean  Drawing by H. L. Todd, from a specimen collected by the steamer Blake, at station 56, in N. lat. 23° 09′, W. lon. 82° 21′ 30′′, at a depth of 175 fathoms. (Four-fifths natural size.)	407
341.	Hymenocephalus cavernosus, Goode and Bean.  Drawing by S. F. Denton, from type No. 37337, U.S. N. M., collected by the steamer Albatross, at station 2398, in N. lat. 28° 45′, W. lon. 86° 26′, at a depth of 227 fathoms. (Slightly enlarged.)	408

### PLATE XCVIII.

Text	page.
342 Lionurus filicauda, Günther. Ontline from Günther, Challenger Report, Vol. XXII, Pl. XXXIV.	409
Drawing by A. H. Baldwin, from type No. 37335, U. S.N. M., collected by the steamer Albatross, at station 2394, in N. lat. 28° 38′ 30″, W. lon. 87 J 02 , at a depth of 420 fathoms. (Slightly enlarged.)	410
544. Cetonurus globiceps, Vaillant	411
Outline from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XX, Fig. 1.  345. Chalinuras imula, Goode and Bean.	412
Drawing by H. L. Todd, from No. 39152 U. S. N. M., collected by the steamer Albatross, at station 2005, in N. lat. 395 29', W. lon. 70 58 40', at a depth of 1,312 fathoms.	*1.0
PLATE XCIX.	
345A. Chalinura mediterranea, Giglioli.  Outline by Prof. M. H. Giglioli, from a specimen in the Central Collection of Italian Vertebreta, Royal Zoölogical Museum, Florence, Italy. (Slightly reduced.)	525
346. Nematonurus gigas, (Vaillant), Goode and Bean	416
347. Moseleya longifilis, (Günther), Goode and Bean	417
PLATE C.	
348. Abyssicola macrochira, (Giinther), Goode and Bean	417
349. Trachythyuchus scabius, (Ratinesque), Goode and Bean	417
349A. Macrurus longifilis, Giinther	117
PLATE CL.	
350. Macrurus Novæ-zelandiae, (Hector), Günther	418
351. Steindachneria argentea, Goodo and Bean.  Drawing by H. L. Todd, from type No. 37350, U. S. N. M., collected by the steamer Albatross, at station 2378, in N. lat. 39°14′30″, W. lon. 88° 09°30′, at a depth of 68 fathoms. (About four fifths natural size.)	-119
352. Bathygadus favosus, Goode and Bean.  Drawing by H. L. Todd, from the type specimen collected by the steamer Blake, at station LXXX, off Martinique, in 472 tathoms. (About one half natural size.)	420
353, 354. Cœlorhynchus carminatus, Goode. Drawings by H. L. Todd, from No. 26187, U. S. N. M., collected by the steamer Fish Hawk, at station 893, off Marthas Vineyard, in 372 fathoms. (Natural size.)	398
PLATE CH.	
Drawings by 11. L. Todd, from No. 26102, U. S. N. M., collected by the the steamer Fish Hawk, at stations 875, 876, off Marthas Vineyard, in 120 to 126 fathoms. (About four-fifths natural size.)	428
Drawings by H. L. Todd, from a specimen collected by the steamer Albatross, at station 2101, in N. lat. 28–38–307, W. lon. 852–52′307, at a depth of 112 fathous. (Enlarged about one-half.)	428
356 V. Glyptocephalus cynoglossus, (Linnaeus), Gill.  Drawing by S. F. Denton, from No. 39487, U. S. N. M., collected by the steamer Albatross, al station 2552, in N. 1at, 39 47′ 07″, W. lon. 70° 35′, at a depth of 721 fathoms. (Natural size.)	430
256B. Glyptocephalus cynoglossus, (Linnaus), Gill.  Drawing by S. F. Denton, from a specimen collected by the steamer Albatross, at station 2543, in N. lat. 39° 58′ 15°, W. lon. 70° 42° 30°, at a depth of 166 fathoms. (Natural size.)	430

## PLATE CIII.

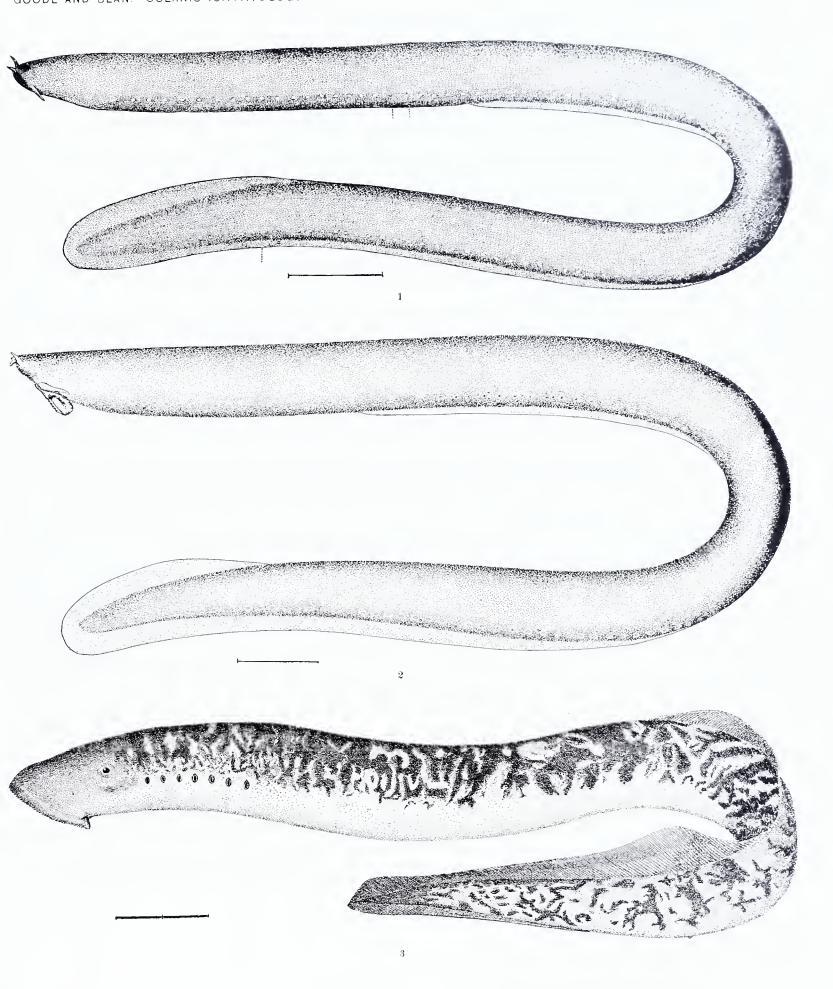
${ m Tex}$	t page.
357A, B. Monolene sessilicauda, Goode.  Drawings by H. L. Todd, from No. 26120, U. S. N. M., collected by the steamer Fish Hawk, off Newport, R. I. (About five-sevenths natural size.)	452
358. Monolene atrimana, Goode and Bean	455
359. Monolene atrimana, Goode and Bean  Drawing by H. L. Todd, from No. 26005, U. S. N. M., collected by the steamer Fish Hawk, at stations 871 and 872, off Marthas Vineyard, in 86 to 115 fathoms. (Natural size.)	455
PLATE CIV.	
360. Etropus rimosus, Goode and Bean	
361. Etropus rimosus, Goode and Bean	
362. Notosema dilecta, Goode and Bean	
PLATE CV.	
363. Hippoglossus vulgaris, Fleming	434
364. Platysomatichthys hippoglossoides, (Walbaum), Goode and Beau	435
PLATE CVI.	
365A, B. Notosema dilecta, Goode and Bean	437
366A, B. Citharichthys arctifrons, Goode	
PLATE CVII.	
367. Hippoglossoides platessoides, (Fabrieius), Gill	438
368. Cyclopsetta fimbriata, Goode and Bean.  Drawing by H. L. Todd, from type No. 37330, U. S. N. M., collected by the steamer Albatross, at Station 2403, in N. lat. 28° 42′ 30″, W. lon. 85° 29′, at a depth of 88 fathoms. (Seventenths natural size.)	
PLATE CVIII.	
369A B. Citharichthys unicornis, Goode	
370. Citharichthys spilopterus, Günther.  Drawing by H. L. Todd, from a specimen collected by the steamer <i>Blake</i> , at station CCXLIV, in N. lat. 23° 13′, W. lon. 89° 10′, at a depth of 84 fathoms. (Slightly reduced.)	
371. Scianectes macrophthalmus, Alcock	440

	PLATE CIX.	
372.	Trichopsetta ventralis, (Goodo and Bean), Gill.  Drawing by H. L. Todd, from No. 37372, U. S. N. M., collected by the steamer Albatross, at station 2378, in N. lat. 29 13 30", W. lon. 88° 09, 30", at depth of 68 fathems. (Slightly enlarged.)	440
373.	Citharichthys pætulus, (Goode and Bean), Jordan and Gilbert	448
	PLATE CX.	
314.	Aphoristia fasciata, Goode and Beau  Drawing by H. L. Todd, from No. 37318, U. S. N. M., collected by the steamer <i>Albatross</i> , at Jamaica, West Indies.	458
<b>9</b> 75.	Aphoristia nebulosa, Goode and Bean.  Drawing by 11. L. Todd, from the type specimen, collected by the steamer <i>Blake</i> , at station cccxq1, in N. lat. 32° 07, W. lon. 78° 37′ 30″, at a depth of 229 fathoms.	458
876.	Aphoristia marginata, Goode and Bean.  Drawing by H. L. Todd, from a specimen collected by the steamer Albatross, at station 2376, in N. lat. 29×03-15", W. lon. 88×16", at a depth of 324 fathoms. (Slightly enlarged.)	459
377.	Aphoristia pigra, Goode and Bean.  Drawing by H. L. Todd, from the type specimen, collected by the steamer <i>Blake</i> , at station XXIII, off St. Kift's, West Indies, in 250 fathoms.	460
378.	Aphoristia diomediana, Goode and Bean.  Drawing by H. L. Todd, from the type specimen, collected by the steamer Albatross, at station 2111, in N. lat. 25° 01′ 30″, W. lon. 82° 59′ 15″, at a depth of 26 fathoms. (About two-thirds natural size.)	460
379.	Aphoristia pusilla, Goede and Bean.  Drawing by 11. L. Todd, from No. 28778, U.S. N.M., collected by the sleamer Fish Hawk, in N. 1a1. 40° 01′, W. 1on. 69° 56′, off Marthas Vineyard, in 179 fathoms. (About seven-tenths natural size.)	461
	PLATE CXI.	
380.	Prionotus militaris, Goode and Bean.  Drawing by H. L. Todd, from the type specimen, collected by the steamer Albatross, at station 2362, off Cape Catoche, Yucatan, in N. lat. 22 08° 30°, W. lon. 86° 53′ 30°, at a depth of 25 fathoms.	464
381.	Prionotus egretta, Goode and Bean.  Drawing by M. M. Smith, from a specimen collected by the steamer <i>Blake</i> , at station LXIV, off Barbadoes, in 100 to 200 fathoms.	465
382.	Prionotus alatus, Goode and Bean.  Drawing by H. L. Todd, from a specimen collected by the steamer Blake, off Charleston, S. C., in N. lat. 32° 31′ 50″, W. lon. 78° 45′, at a depth of 75 fathoms.	467
	PLATE CXH.	
383,	383B. Prionotus trinitatis, Goode and Bean Drawings by H. L. Todd, from type No. 39318, 17. S. N. M., collected by the steamer <i>Albatross</i> , al station 2120, off Trinidad, in N. lat. 11-07', W. lon. 62.5 f1' 30'', at a depth of 73 fathoms.	468
381.	Prionotus militaris, Goode and Bean.  Drawing by H. L. Todd, from the type specimen, collected by the steamer Albatross, at Station 2362, off Capo Catoche, Yucatan, in N. lat. 22, 9 08' 30", W. lon. 869 53' 30", at a depth of 25 fathoms.	464
	PLATE CXIII.	
355,	385A, B. Peristedion miniatum, Goode.  Drawings by H. L. Todd, from type No. 26023, U. S. N. M., collected by the steamer Fish Hawk, at station 869, in N. lat. 40 - 02 18", W. lon. 70 23' 06", at a depth of 192 fathoms. (No. 385 reduced about one-half; Nos. 385A, B natural size.)	470

#### PLATE CXIV.

386.	Peristedion longispatha, Goode and Bean  Drawing by H. L. Todd, from the type specimen, collected by the steamer Blake, at station LVIII., off Ilavana, in 242 fathoms. (About seven-ninths natural size.)	472
	Peristedion gracile, Goode and Bean	173
388A	Drawings by H. L. Todd, from the type specimen, collected by the steamer <i>Blake</i> , at station Lx, off Barbados, in 123 fathoms. (Natural size.)	171
	PLATE CXV.	
389.	Lophotes Cepedianus, Giorna.  Drawing from Temminck and Schlegel, Fauna Japonica, Pl. LXXI, Fig. 2.	319
390.	Lophotes Capellei, Temminck and Schlegel. Outline from Temminck and Schlegel, Fanua Japoniea, Pl. LXXI.	351
391.	Trachypterus iris, (Gmelin), Cuvier and Valenciennes.  Ontline from Cuvier and Valenciennes, Histoire Naturelle des Poissons de la France, Pl. 297.	477
	PLATE CXVI.	
392.	Trachypterus arcticus, (Brünnich), Nilsson Ontline from Day, Fishes of Great Britain and Ireland, Vol. 1, Pl. LXIII.	479
393.	Stylephorus chordatus, Shaw	482
394.	Stylephorus chordatus, Shaw. Outline from Shaw, Transactions of the Linnean Society of London, Vol. 1, p. 90.	482
	PLATE CXVII.	
395.	Regalecus glesne, Ascanius	480
396.	Macrorhamphosus scolopax, (Linneus), Goode and Benn Drawing by H. L. Todd, from No. 28755, U. S. N. M., collected by the steamer Fish Hawk, at station 940, in N. lat. 39° 54′, W. lon. 69° 51′ 30″, at a depth of 130 fathoms. (Enlarged one-fourth.)	483
397.	Aulostoma longipes, Vaillant. Outline from Vaillant, Expeditions Scientifiques du Travailleur et du Talisman, Pl. XXVII, Fig. 4. (Eight times natural size.)	484
398.	Chaunax pictus, Lowe.  Drawing by H. L. Todd, from No. 26021, U. S. N. M., collected by the steamer Fish Hawk, at station 869, off Martha's Vineyard, in 192 fathoms. (Four times natural size.)	487
399.	Ceratias Holbölli, Kröyer	489
	PLATE CXVIII.	
400,	400A, B. Lophius piscatorius, Linuæns	485
	Drawings by S. F. Denton, from No. 39344, U. S. N. M., collected by the U. S. Fish Commission, 20 miles south of No Man's Land.	
	PLATE CXIX.	
401.	Mancalias Shufeldtii, Gill.  Drawing by H. L. Todd, from No. 33552, U. S. N. M., collected by the steamer Albatross, at station 2099, in N. lat. 37° 12′ 20″, W. lon. 69° 39′, at a depth of 2,949 fathoms. (About two and a half times natural size.)	490
402.	Cryptopsaras Couesii, Gill  Drawing by H. L. Todd, from No. 33558, U. S. N. M., collected by the steamer Albatross, at station 2101, in N. lat. 38° 13′ 30″, W. lon. 68° 24′, at a depth of 1,686 fathous. (Three and three-fourths times natural size.)	491

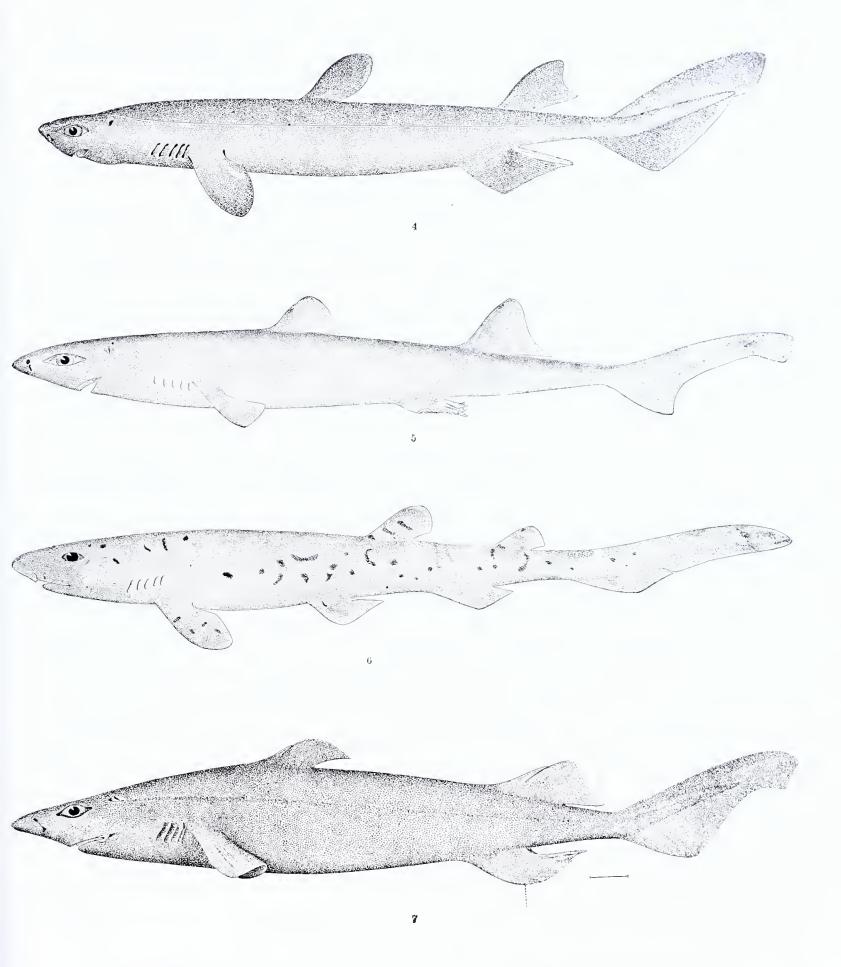
Text	page.
193. Hallieut en stellata, Cuvier and Valenciennes. Outline from Temminck and Schlegel, Fauna Japonica, Pl. 82.	499
Driving from Abook, Annals and Magazine of Natural History, Vol. 11, Pl. 1x, Fig. 6. (Very slightly reduced.)	493
PLATE CXX.	
105. Corynolophus Reinhardtii, (Lütken), Gill Drawing from Lütken, Vidensk, Selsk, Skr. Naturvid, og M.ch. Afh., tv. Pl. 331.	491
106. Melanocetus Johnsonii, Günther	494
407. Liocetus Muriayi, Günther.  Drawing from Günther, Challenger Report, Vol. XXII, Pl. XI.	495
PLATE CXXI.	
108. Linophryne lucifer, Collett	496
100. Caulophryne setosus, Goode and Bean	196
110. Halieutæa coccinea, Alcock.  Drawing from Alcock, Annals and Magazine of Natural History, Series 6, Vol. VIII, Pl. VIII.	500
111. Maithopsis luteus, Alcock	529
PLATE CXXII.	
412A, B. Halieutella lappa, Goode and Bean.  Drawings by H. L. Todd, from No. 31862, U. S. N. M., collected by the steamer Fish Hawk, at station 1151, in N. lat. 39 - 58 - 30 - W. lon. 70   37', at a depth of 125 fathoms.	500
Dibrauchus atlauticus, Peters  Drawings by H. J., Todd, from No. 26088, U. S. N. M., collected by the steamer Fish Hawk, at station 879, off Marthas Vineyard, in 225 fathoms. No. 113A, natural size; No. 113B, enlarged one third.	501
113 V. B. Halieutichthys aculeatus, Mitchill <sup>3</sup> , Goode Drawings by H. L. Todd, from No. 23552, U. S. N. M., collected at Key West, Fla., by J. W. Nelie, Natural size.	504
PLATE CXXIII.	
415. Bathyclipea argentea, toode and Bean.  Drawing by A. II. Baldwin, from a specimen collected by the steamer <i>Blake</i> , at station XXXVII, on Neris, in 365 fathous.—About one half natural size.)	190
11b Schedophilopsis spinosus, Steindachner	216
117 Tetragonurus Cuvieri, Risso	230



1. Myxine glutinosa. (p. 2.) 2. Myxine australis. (p. 3.)

3. Petromyzon marinus. (p. 4.)

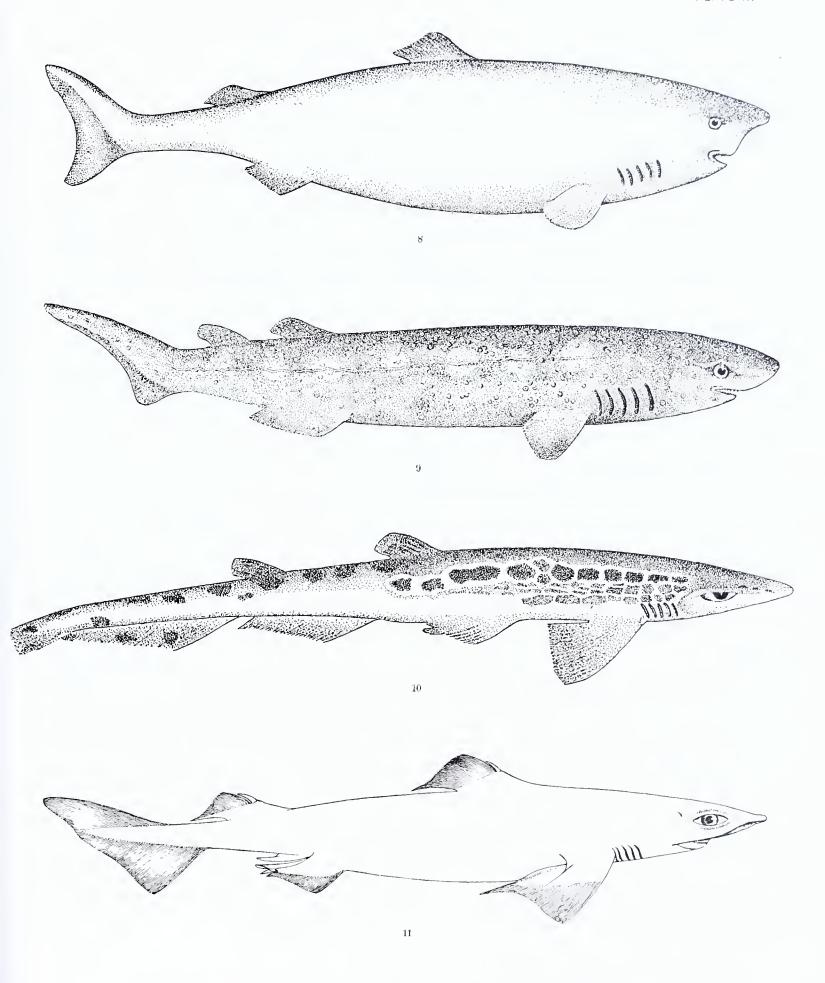




4. Scymnorhinus licha. (p. 7.) 6. Scylliorhinus retifer. (p. 16.)

5. Etmopterus pusilius. (p. 10.) 7. Centroscyllium Fabrich. (p. 11.)

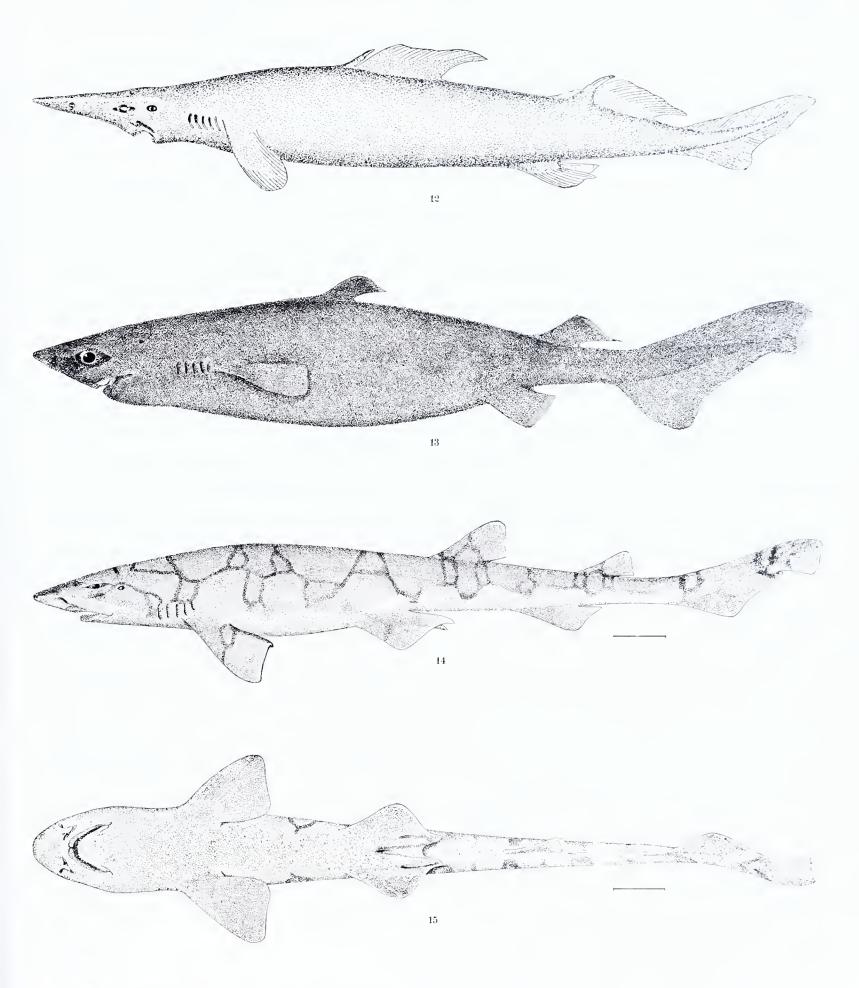




8. Somniosus merocephalus. (p. 7.) 10. Pristiurus melastomus. (p. 20.)

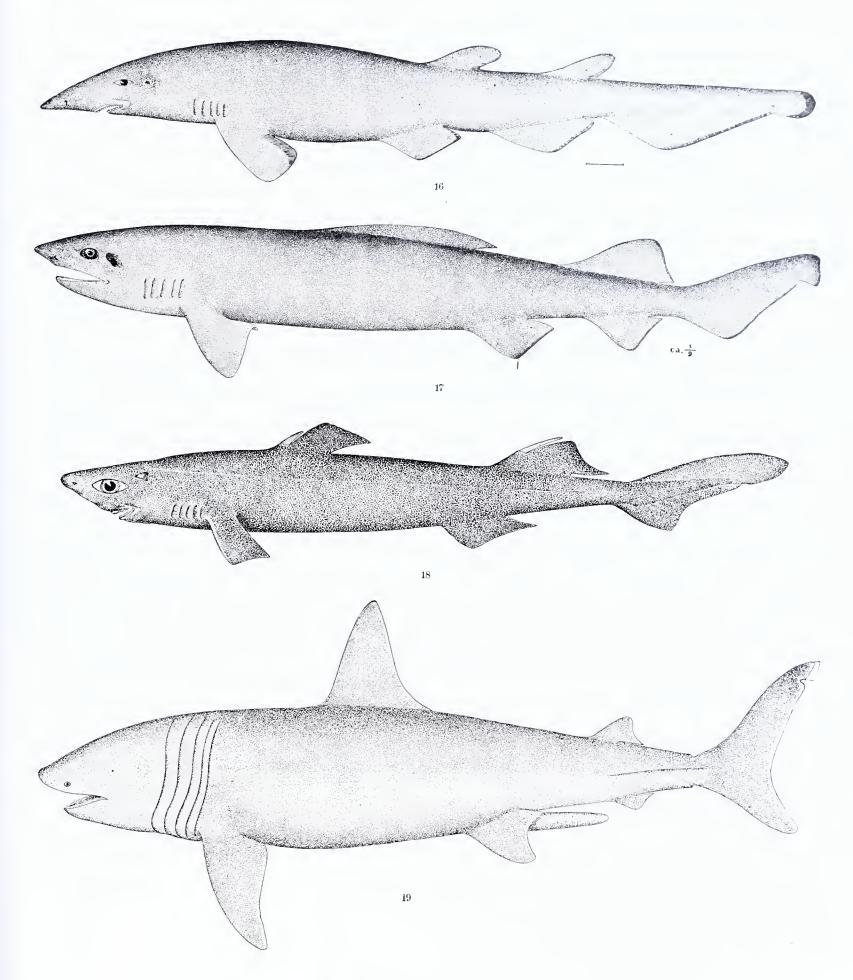
- 9, Echinorhinus spinōsus, (p. 8.) 11, Centrophorus granulosus, (p. 12.)





12. Scymnodon ringens. (p. 11.) 13. Centroscymnus coelolepis. (p. 14.) 14, 45. Scylliorhinus retifer. (p. 14.)

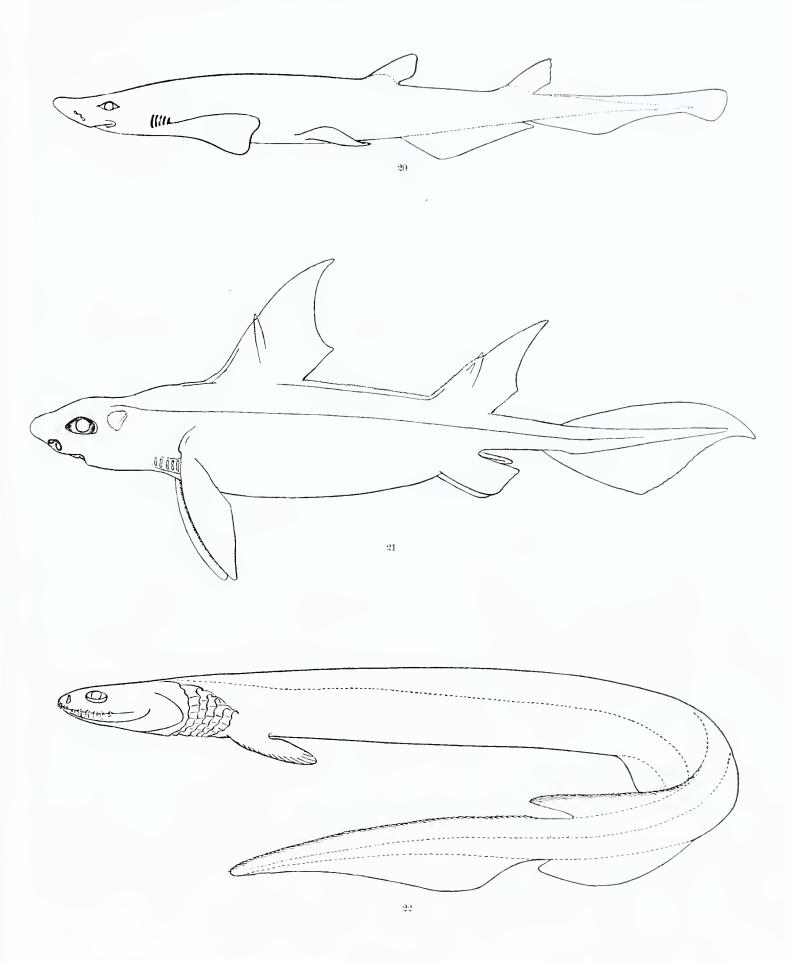




16. Scylliorhinus profundorum. (p. 17.) 18. Spinax niger. (p. 10.)

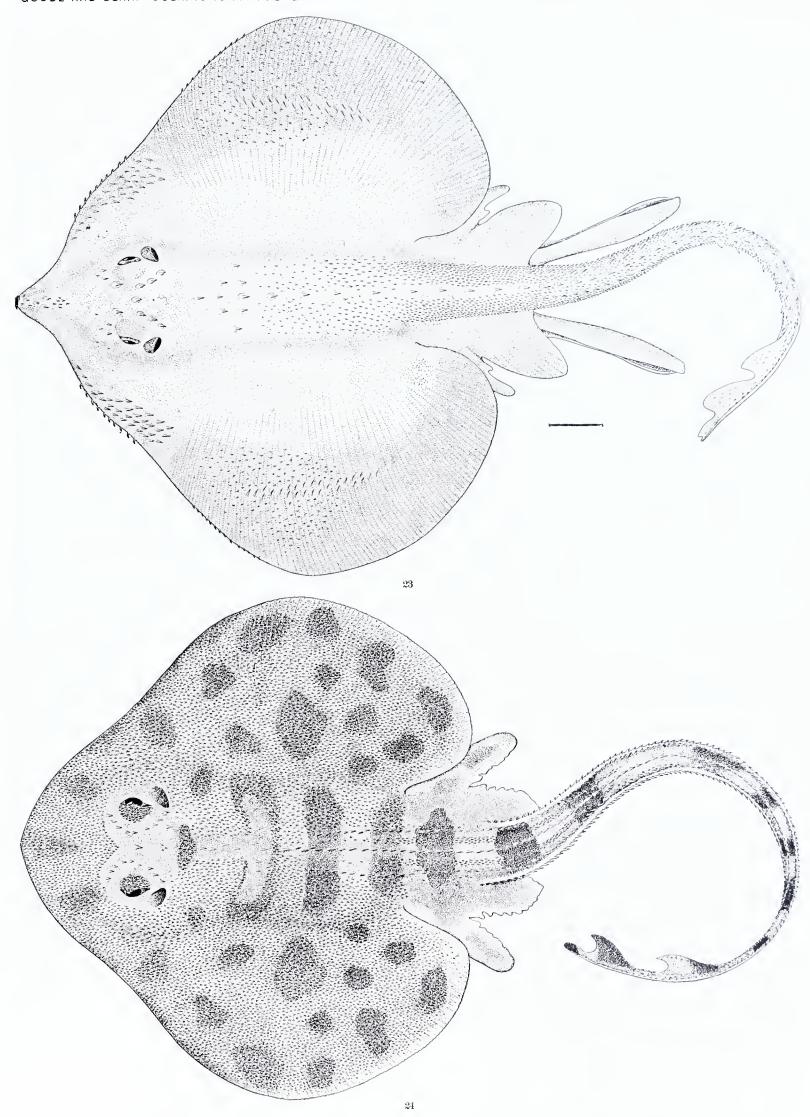
17. Pseudotriacis microdon. (p. 18) 19. Cetorhinus maximus. (p. 21.)





<sup>20.</sup> Pristiurus atlanticus. (p. 21.) 21. Oxynotus centrina. (p. 15.) 22. Chlamydoselachus anguineus. (p. 22.)

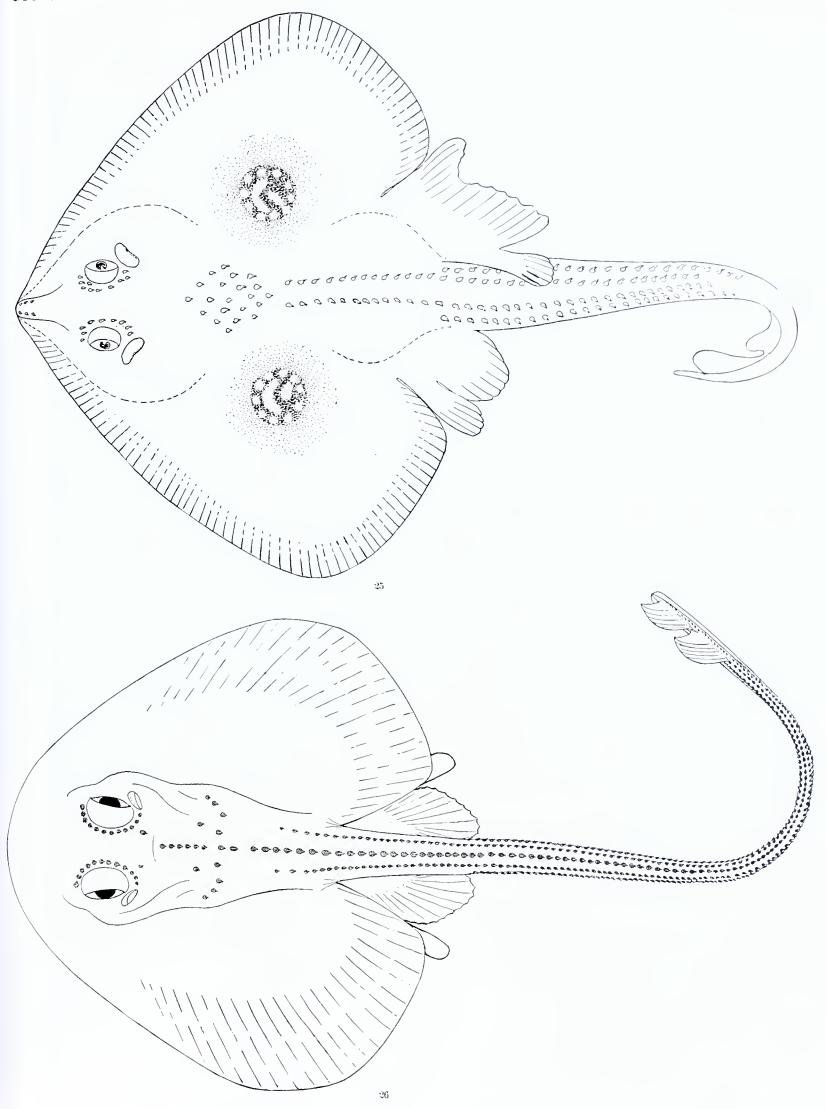




23. Raia Ackleyi. (p. 25.)

24. Raia Ackleyi ornata. (p. 26.)

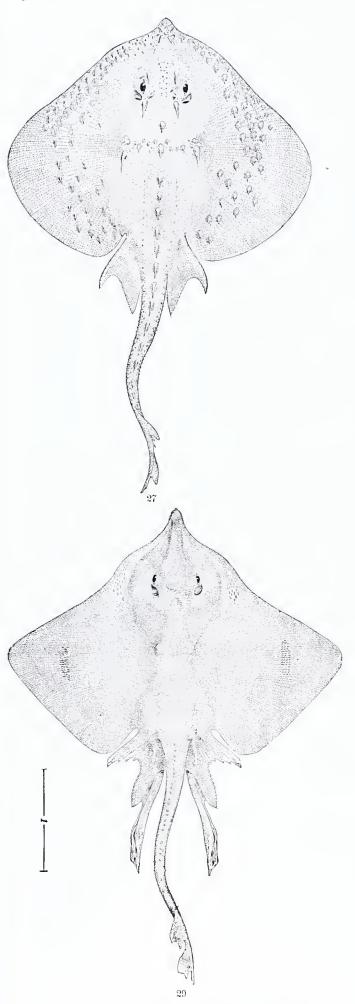




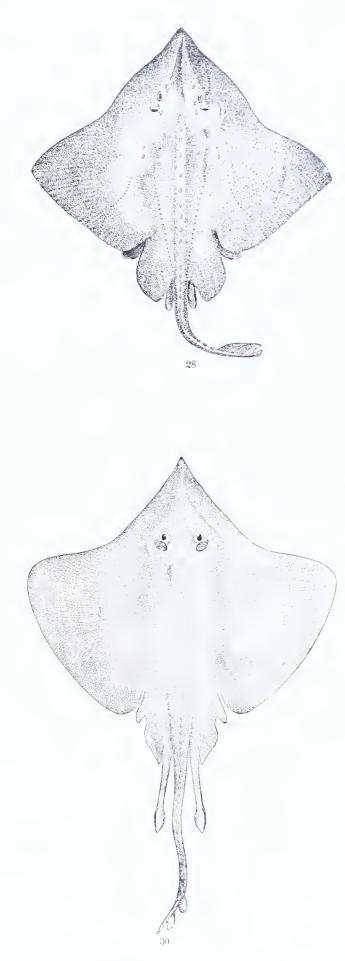
25. Raia circularis. (p. 27.)

26. Raia plutonia. (p. 27.)



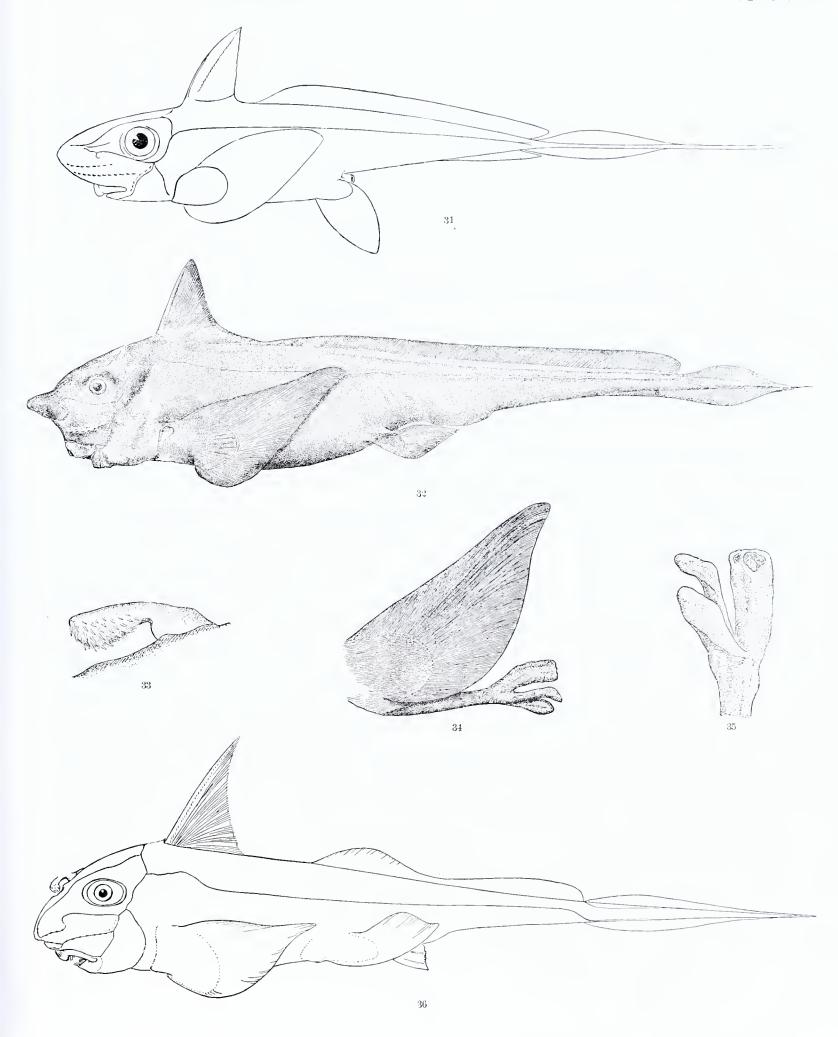


27. Raia radiata. (p. 25.)29. Raia lævis. (p. 28.)



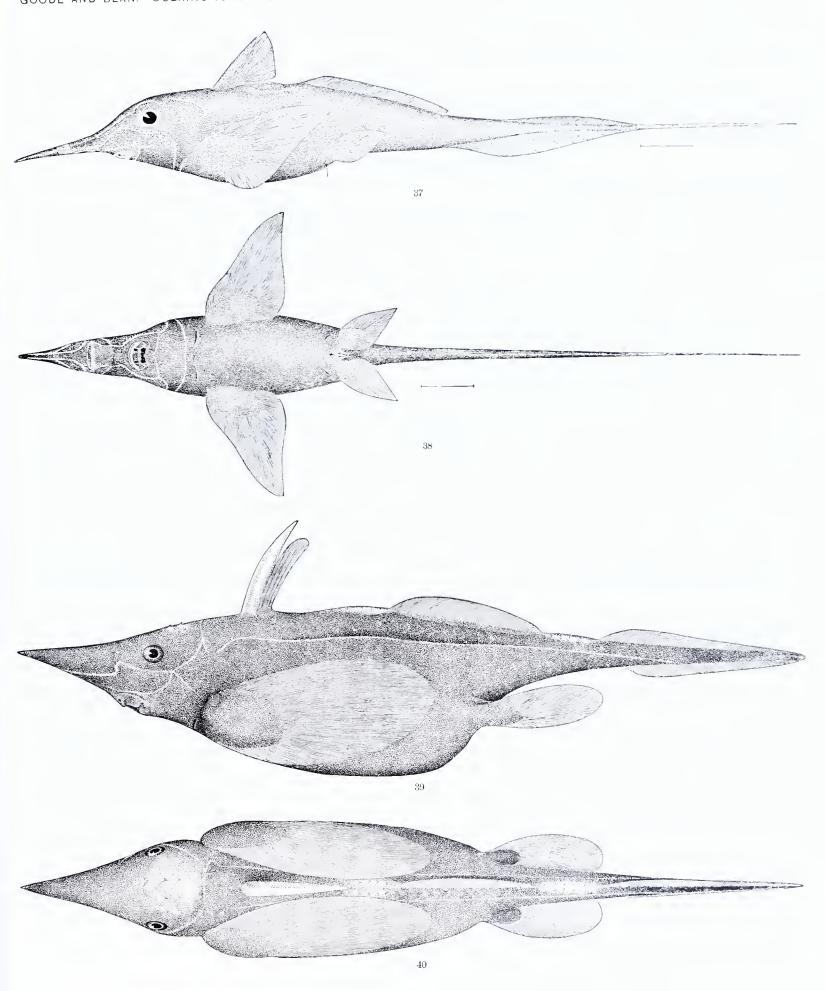
28. Raia hypereorea. (p. 28.) 30. Raia granulata. (p. 29.)





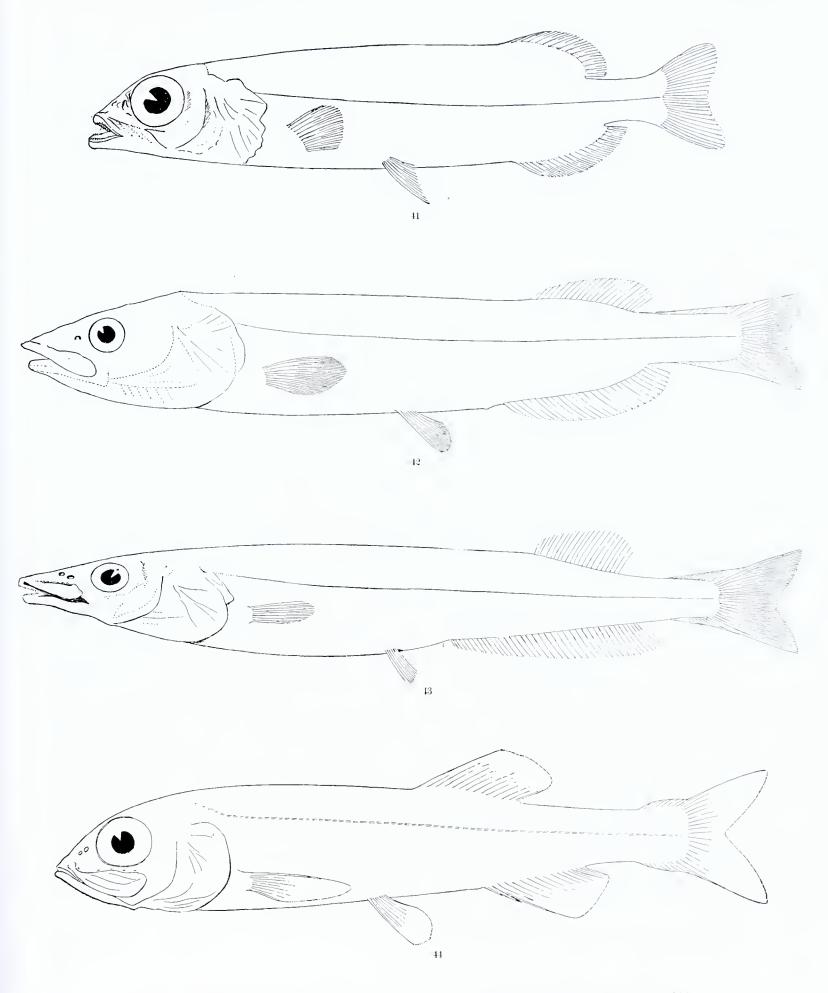
31. Chimæra monstrosa. (p. 31.) 32-35. Chimæra affinis. (p. 31.) 36. Callorhynchus antarcticus. (p. 32.)





37-40. Harriotta Raleighana. (p. 33.)

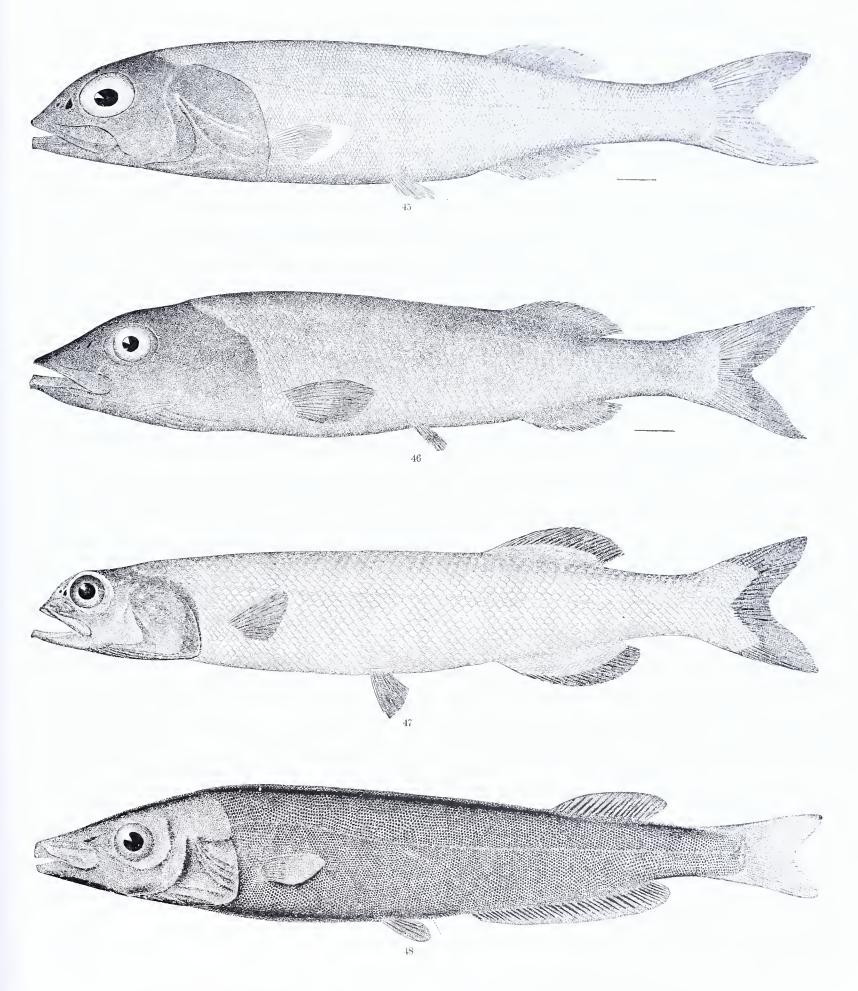




41. Alepocephalus rostratus. (p. 36.) 43. Conocara macroptera. (p. 39.)

42. Alepocephalus niger. (p. 38.) 44. Bathytroctes macrolepis. (p. 41.)

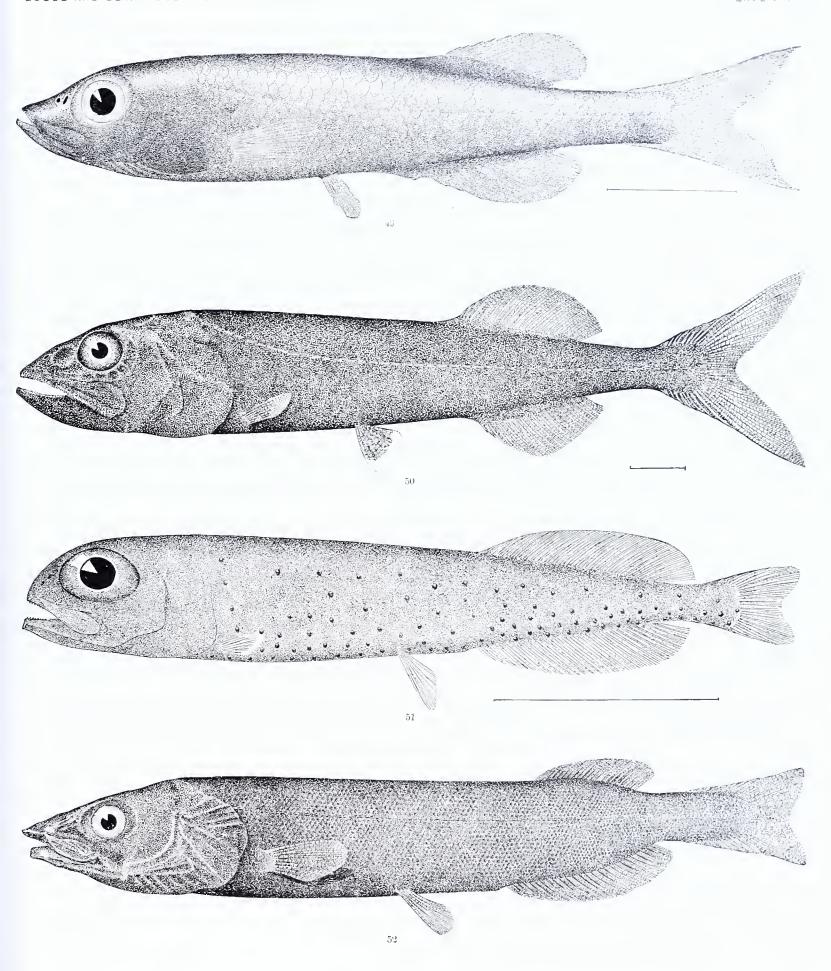




45. Alepocephalus Agassizh. (p. 37.) 47. Alepocephalus Bairdh. (p. 38.)

46. Alepocephalus productus. (p. 37.) 48. Cozocara McDonaldi. (p. 39.)

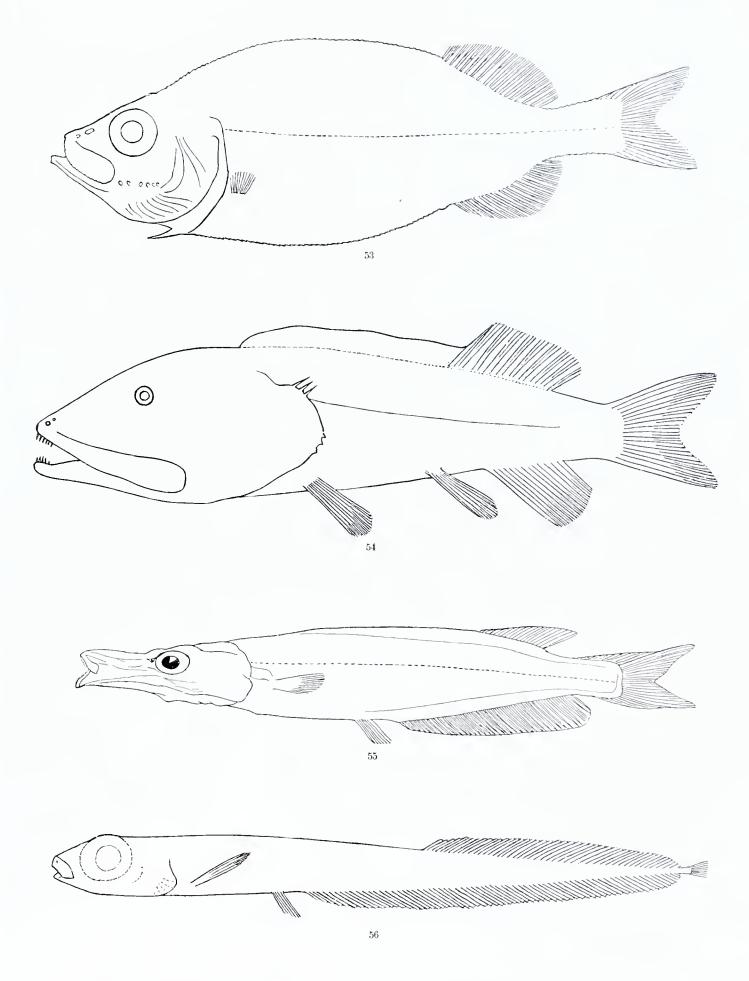




49. Bathytroctes antillarum. (p. 44.) 51. Aleposomus Copei. (p. 47.)

50. Bathytroctes æquatoris. (p. 44.) 52. Pterothrissus gissu. (p. 51.)

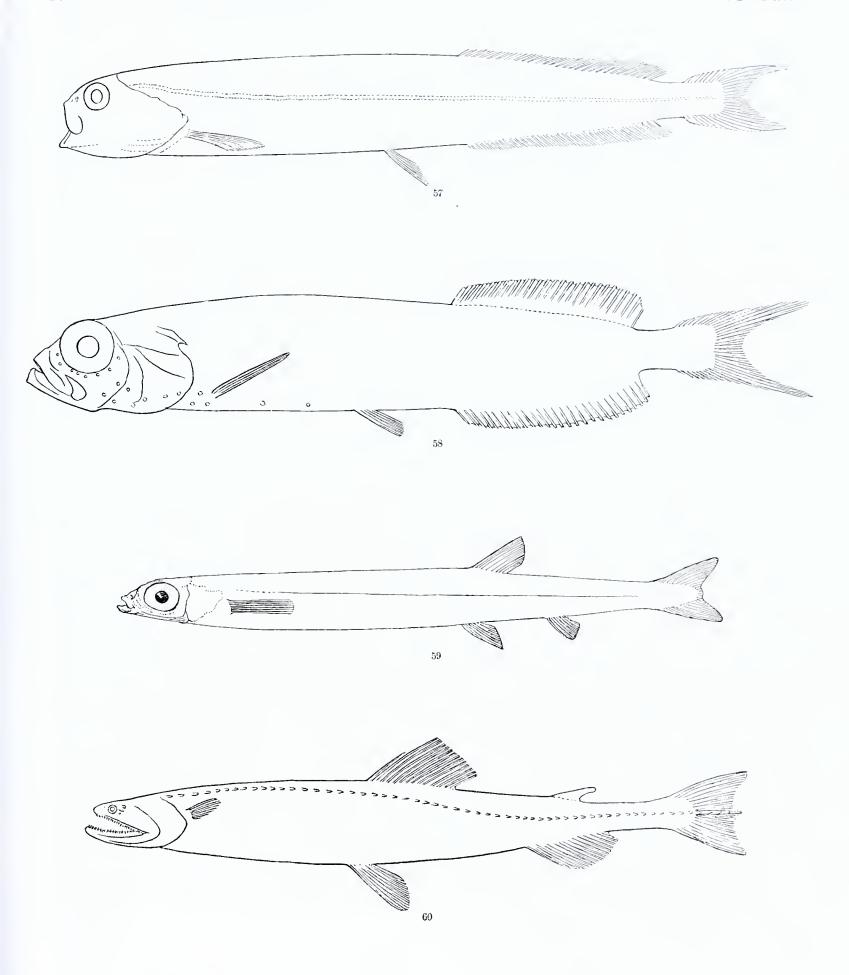




53. Platytroctes apus. (p. 46.) 55. Aulastomatomorpha phosphorops. (p. 50.)

54. Anomalopterus pinguis. (p. 49.) 56. Leptoderma macrops. (p. 49.)

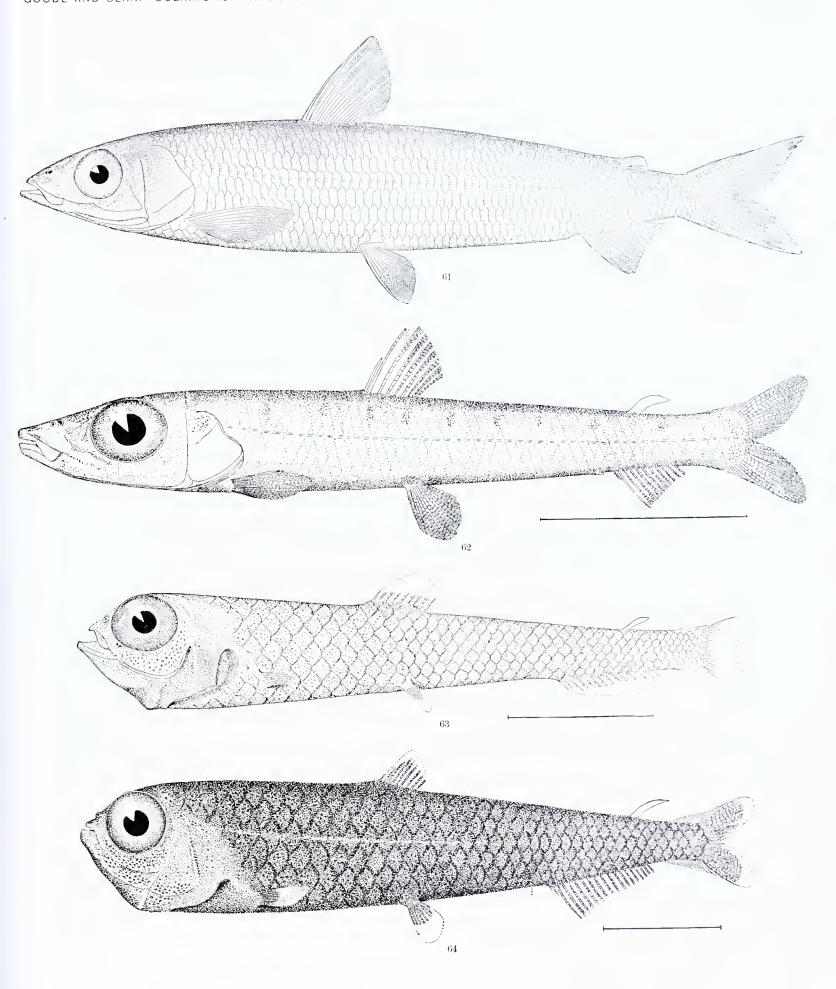




57. Xenodermichthys nodulosus. (p. 46.) 59. Microstoma rotundatum. (p. 53.)

58. Aleposomus socialis. (d. 48.) 60. Harpodon Macrochir. (d. 59.)

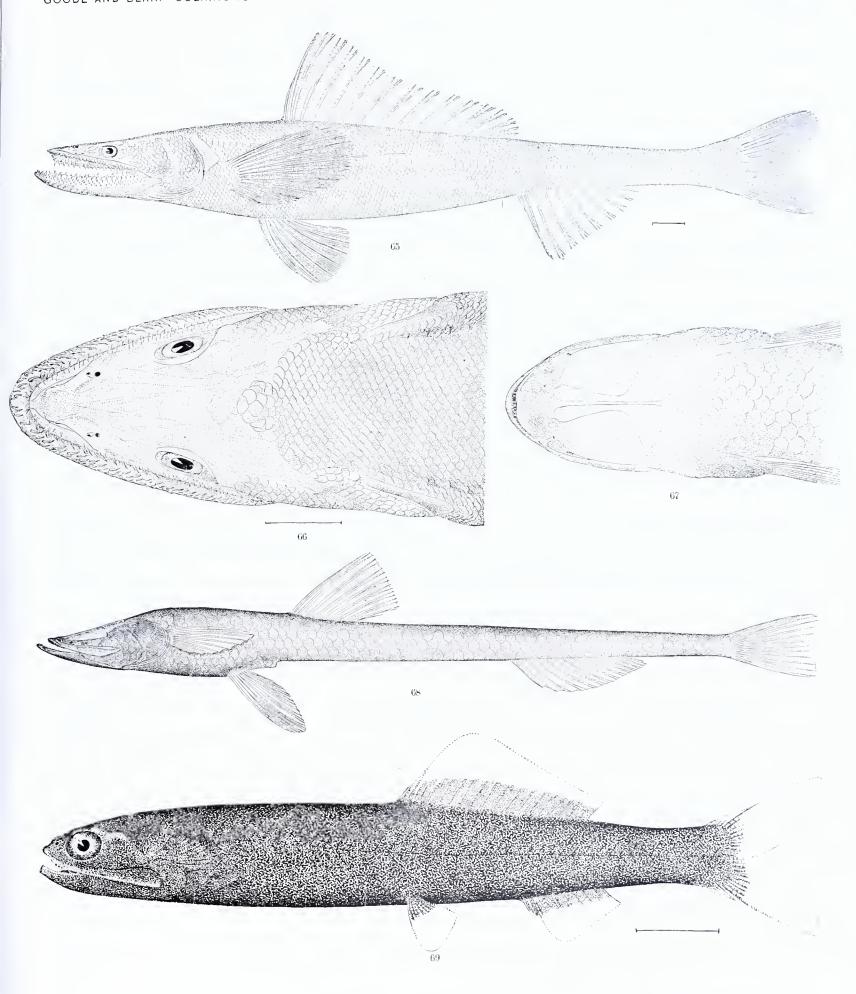




61. Argentina silus. (p. 52.) 63. Bathylagus euryops. (p. 55.)

62. Argentina striata. (p. 52.) 64. Bathylagus Benedicti. (p. 55.)

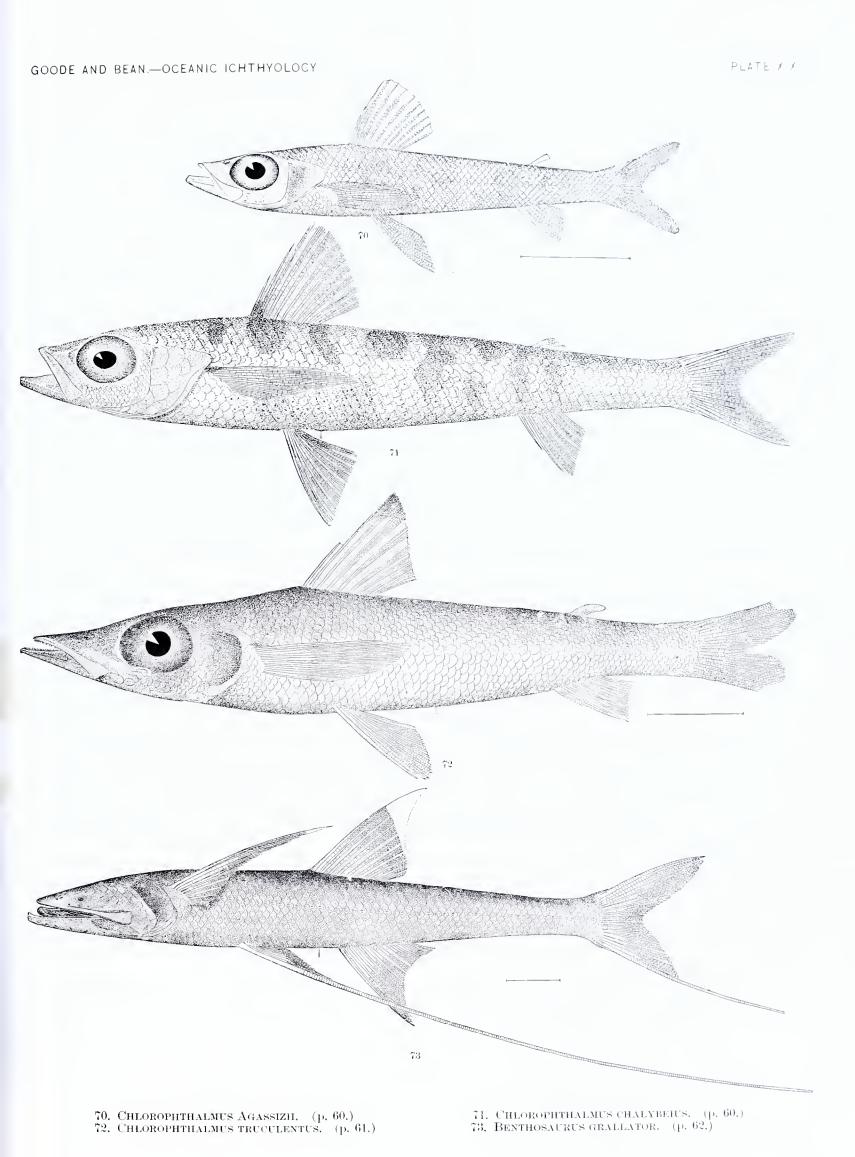




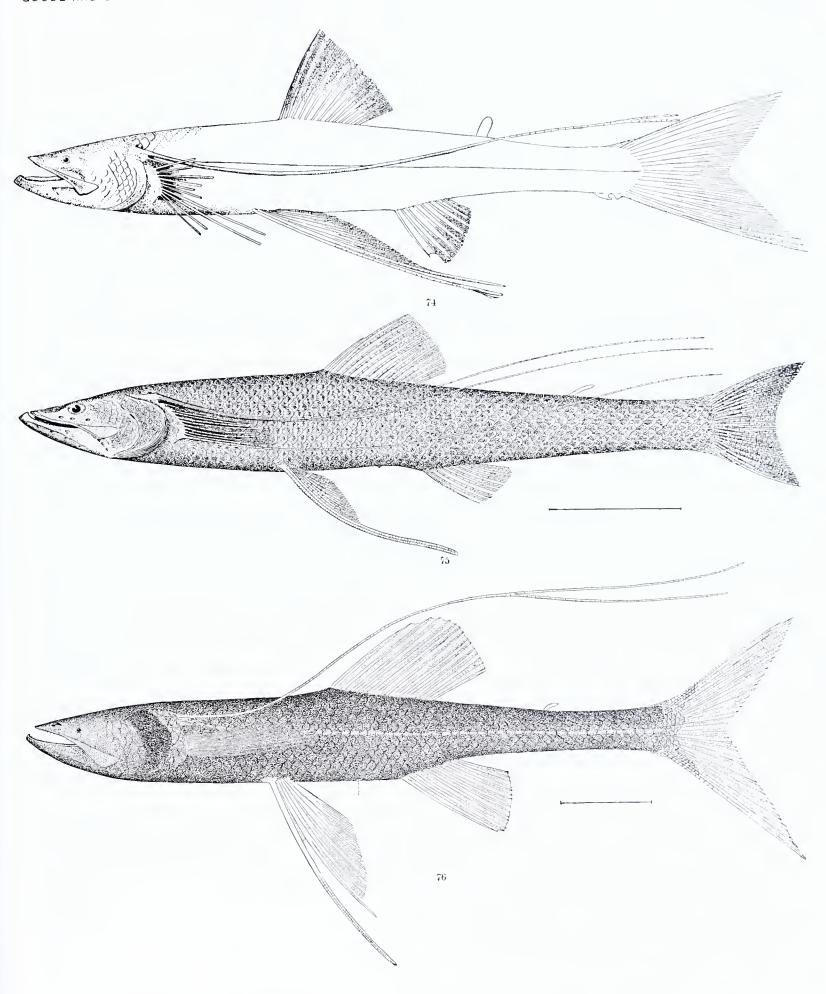
65, 66. Bathysaurus ferox. (p. 58.) 67, 68. Ipnops Murrayi. (p. 67.)

69. Bathylaco nigricans. (p. 57.)



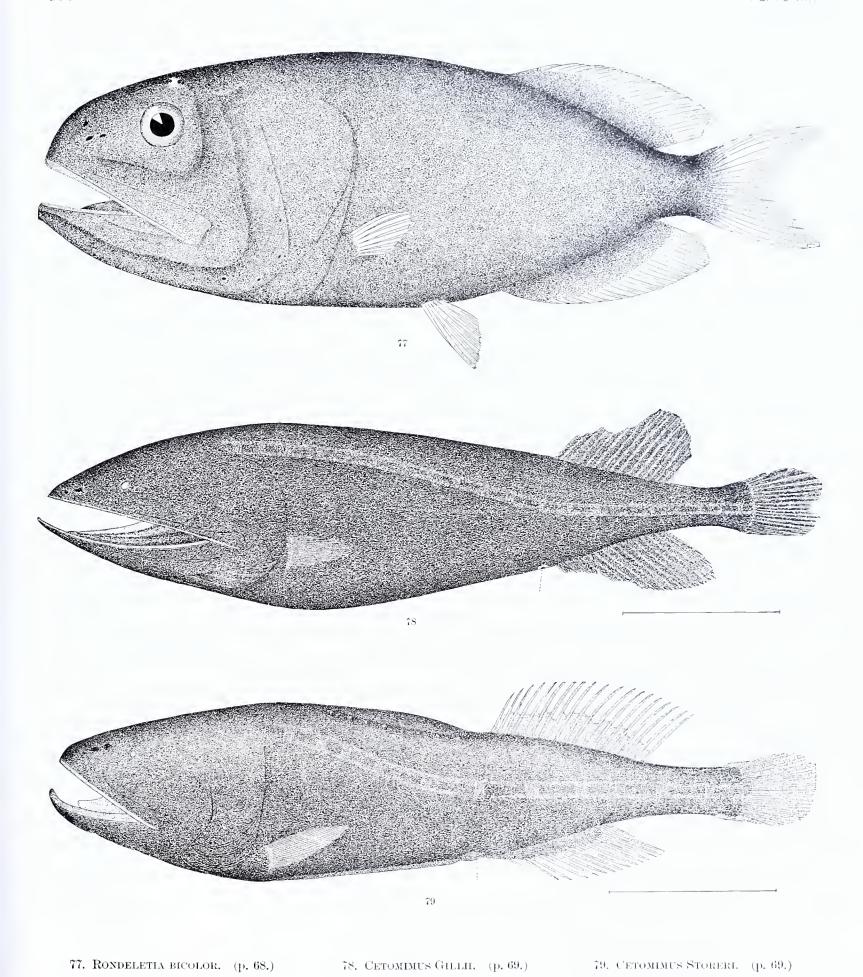




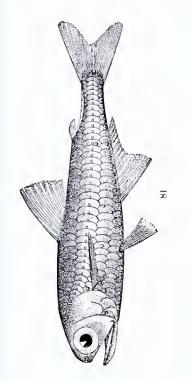


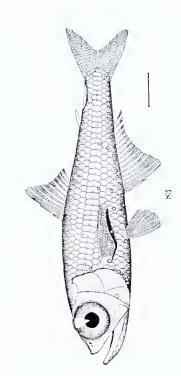
74. Bathypterois dubius. (p. 64.) 76. Bathypterois longipes. (p. 66.) (p. 66.)

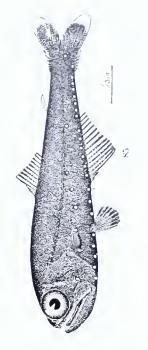




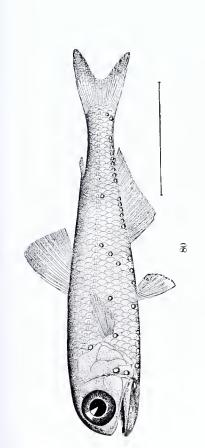


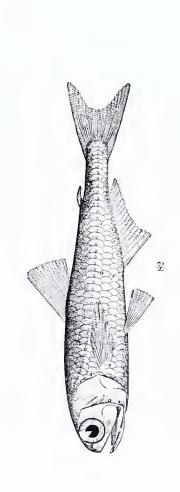


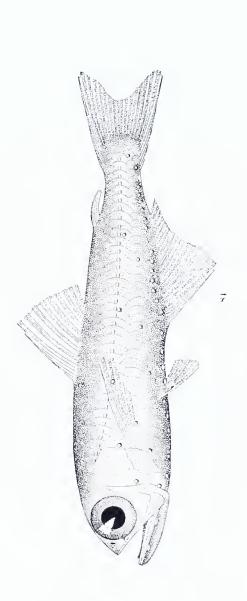




81. Myctophem opalinem. (p. 72.) 83. Myctophem Benotti. (p. 74.) 85. Benthosema Mülleri. (p. 76.)

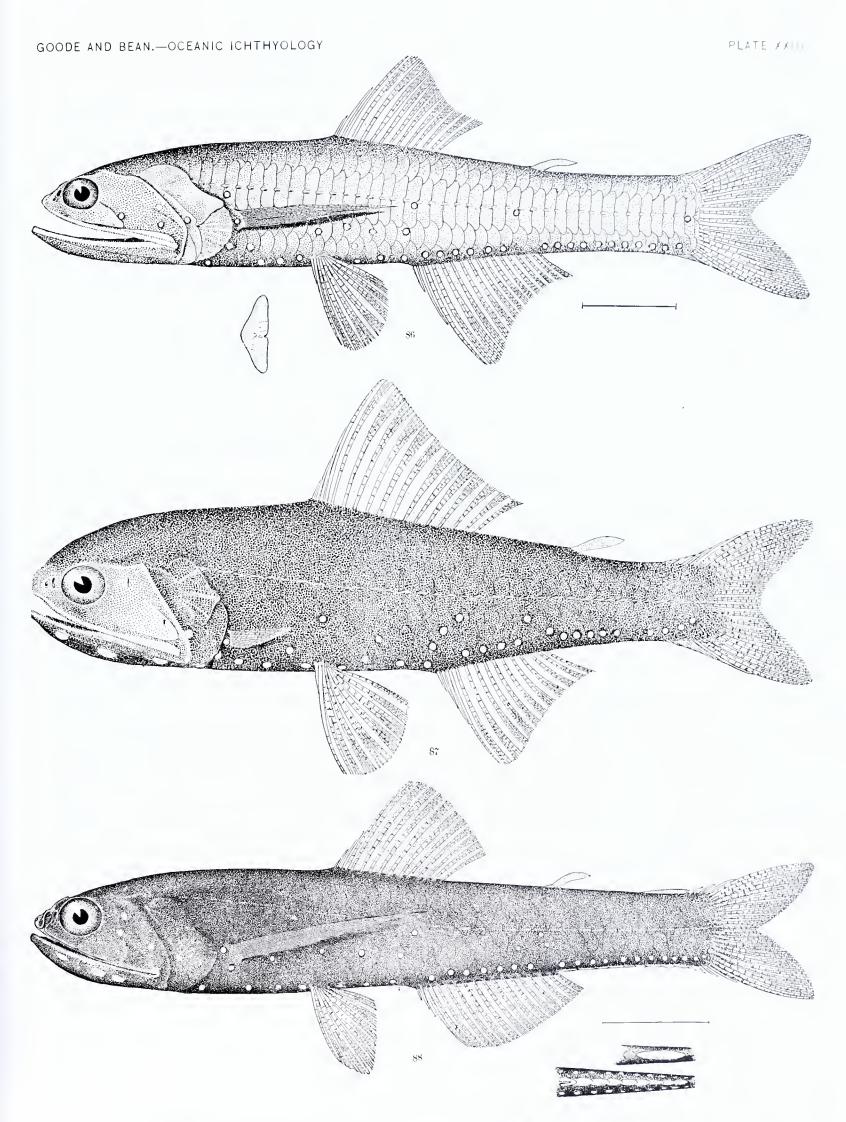






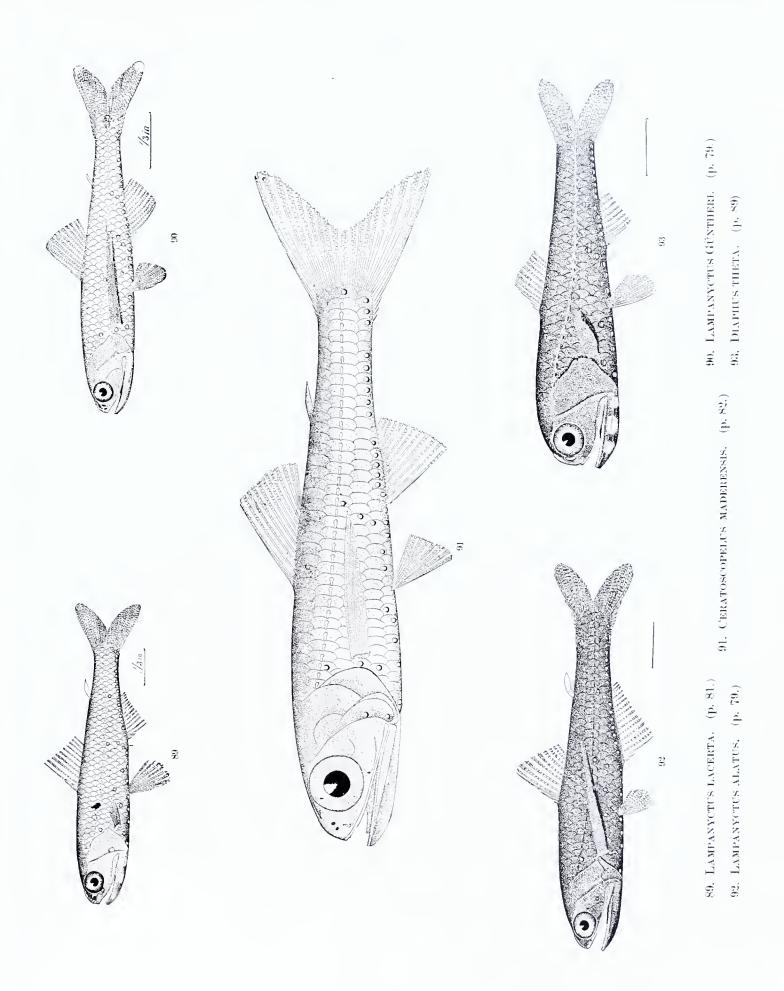
89. Myctophtm punctatum. (p. 71.) 82. Myctophtm Hunboldti. (p. 73.) 84. Myctophum remiger. (p. 75.)



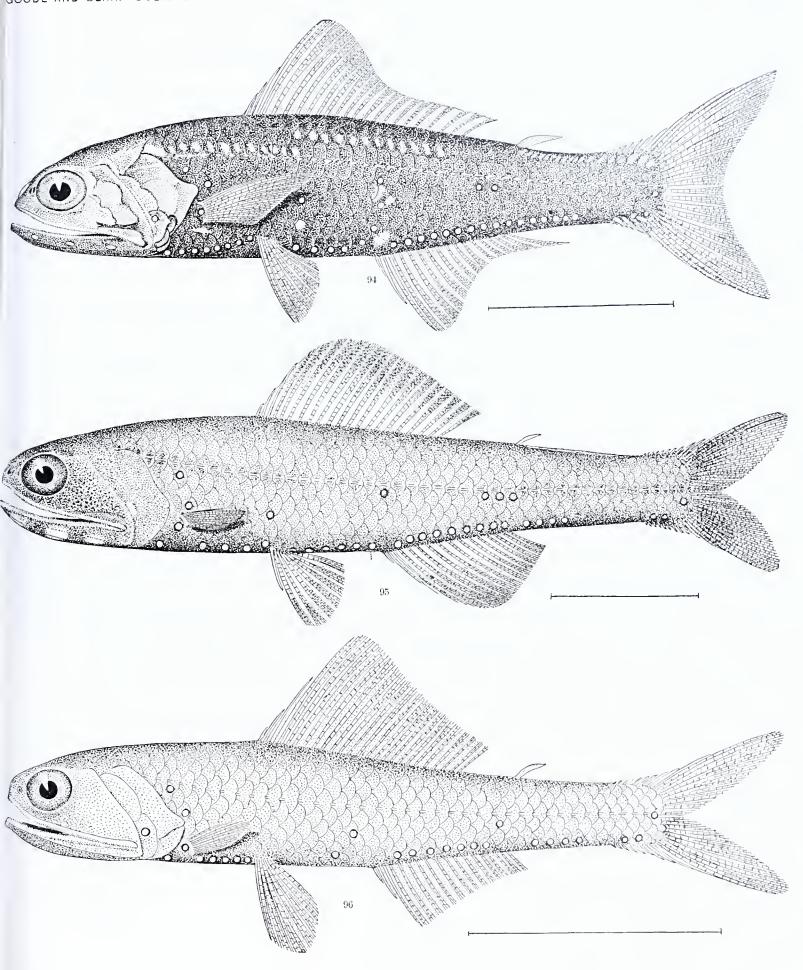


86. Lampanyctus crocodilus. (p. 79.) 87. Lampanyctus Gemellarii. (p. 80.) 88. Lampanyctus gemmifer. (p. 80.)



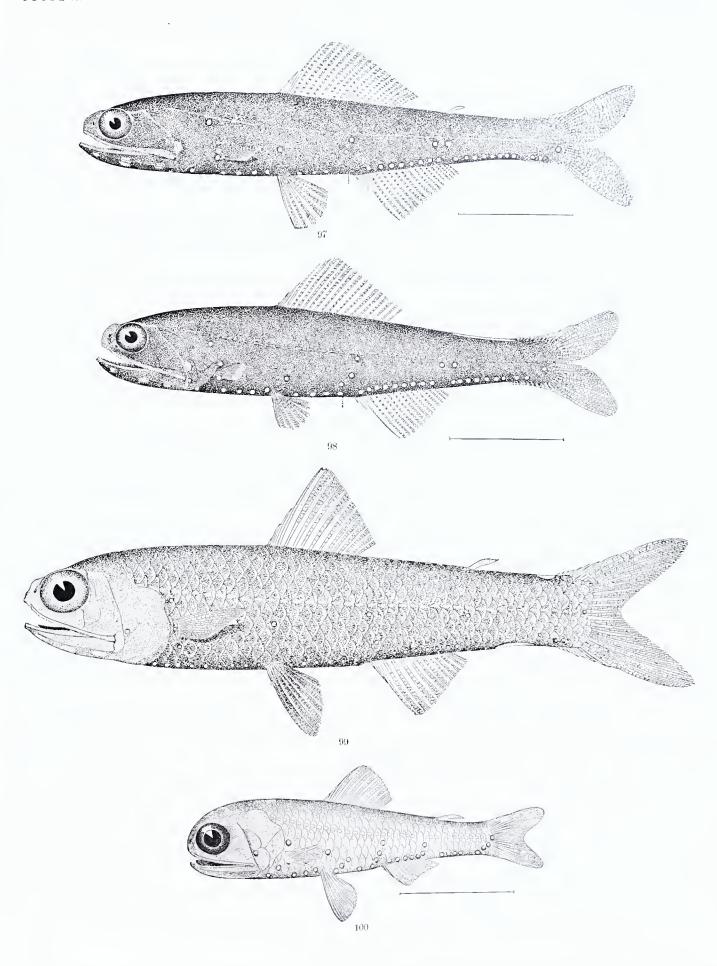






94. Notoscopelus resplendens. (p. 83.) 95. Notoscopelus castaneus. (p. 84.) 96. Notoscopelus caudispinosus. (p. 84.)

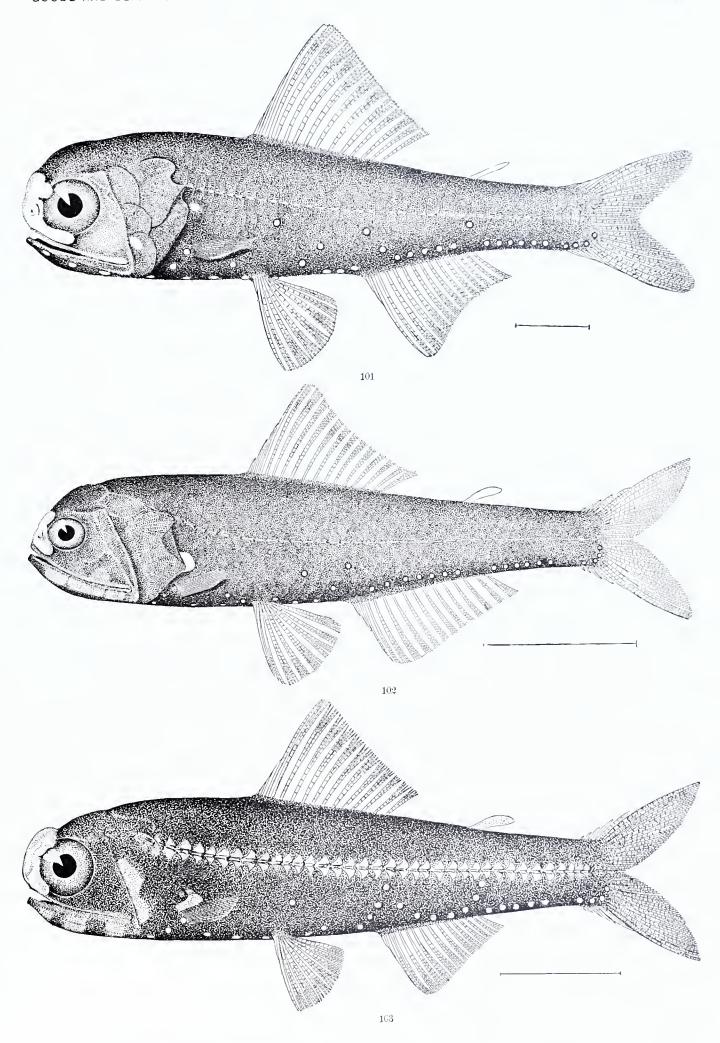




97. Notoscopelus quercinus. (p. 83.) 99. Lampadena speculigera. (p. 83.)

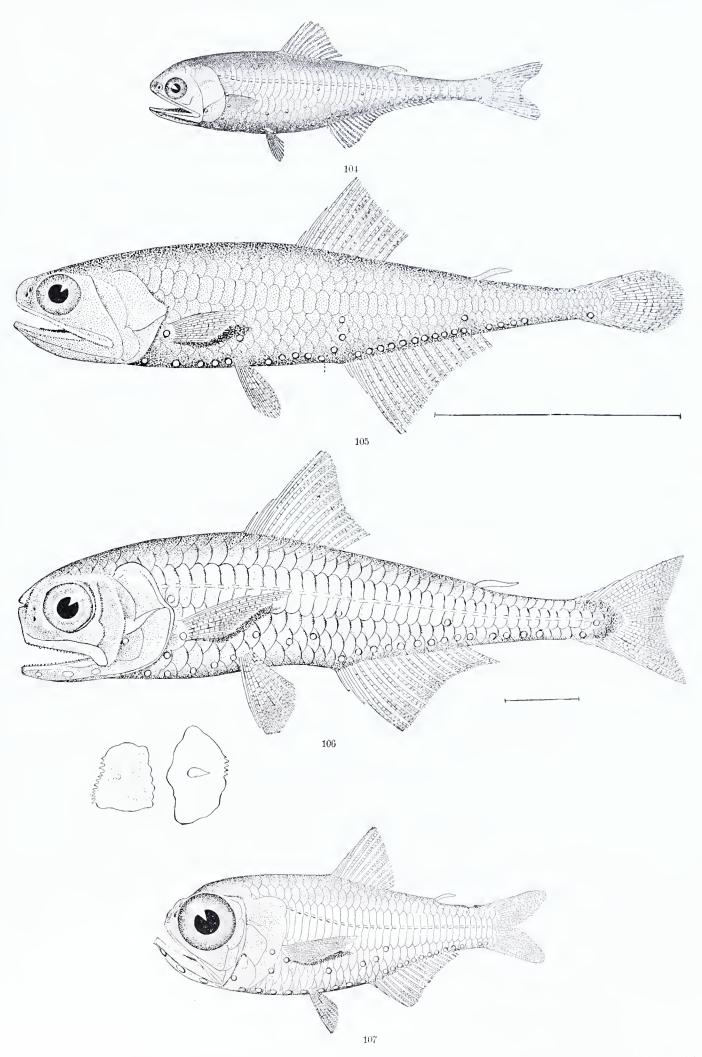
98. Notoscopelus margaritiferus. (p. 84.) 100. Collettia Rafinesquei. (p. 88.)





101. ÆTHOPRORA METOPOCLAMPA. (p. 86.) 103. ÆTHOPRORA EFFULGENS. (p. 87.)

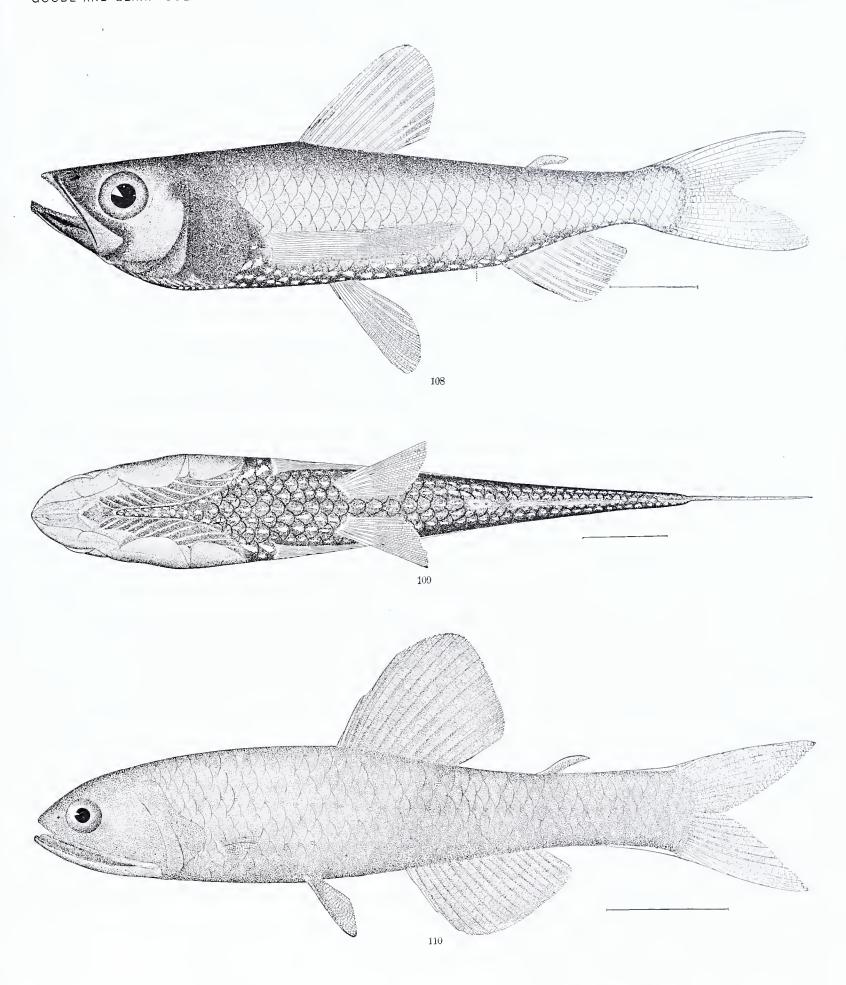




104. Rhinoscopelus Coccol. (p. 90.) 106. Dasyscopelus asper. (p. 92.)

105. Tarletonbeania tenua. (p. 89.) 107. Electrona Rissol. (p. 91.)

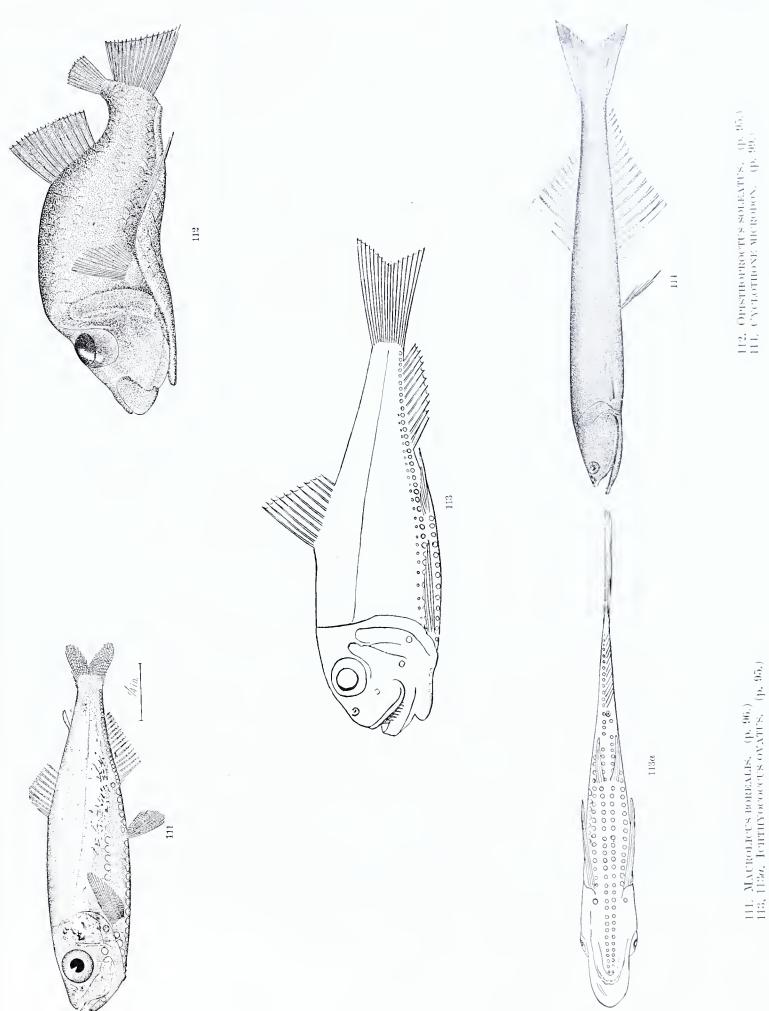




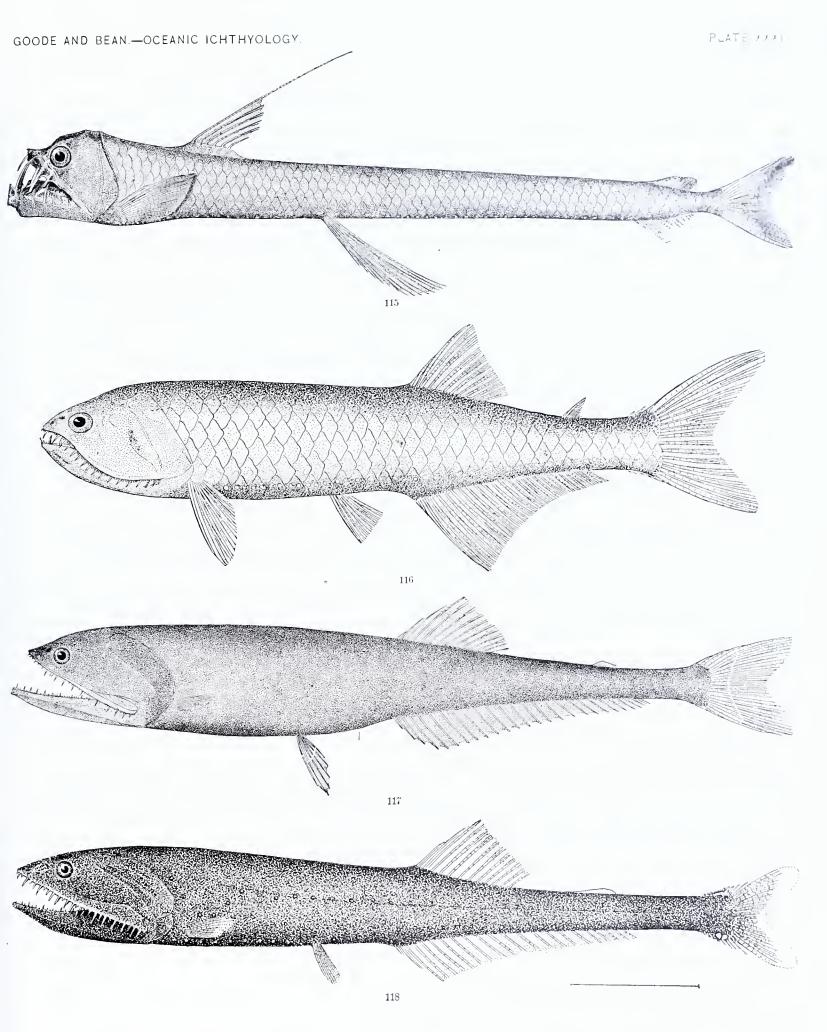
108, 109. Neoscopelus macrolepidotus. (p. 93.)

110. Nannobrachium MacDonaldi. (p. 94.)





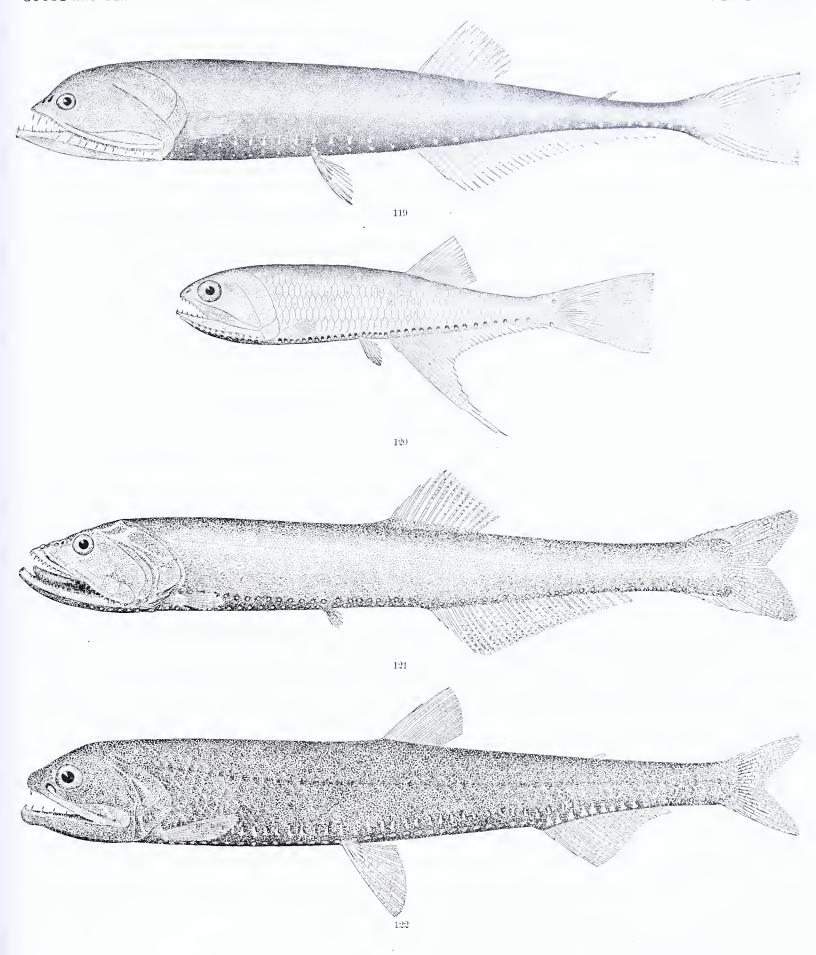




115. Chauliodus Sloanii. (p. 96.) 117. Gonostoma brevidens. (p. 98.)

116. Gonostoma denudatum. (р. 98.) 118. Cyclothone ватнурніца. (р. 100.)

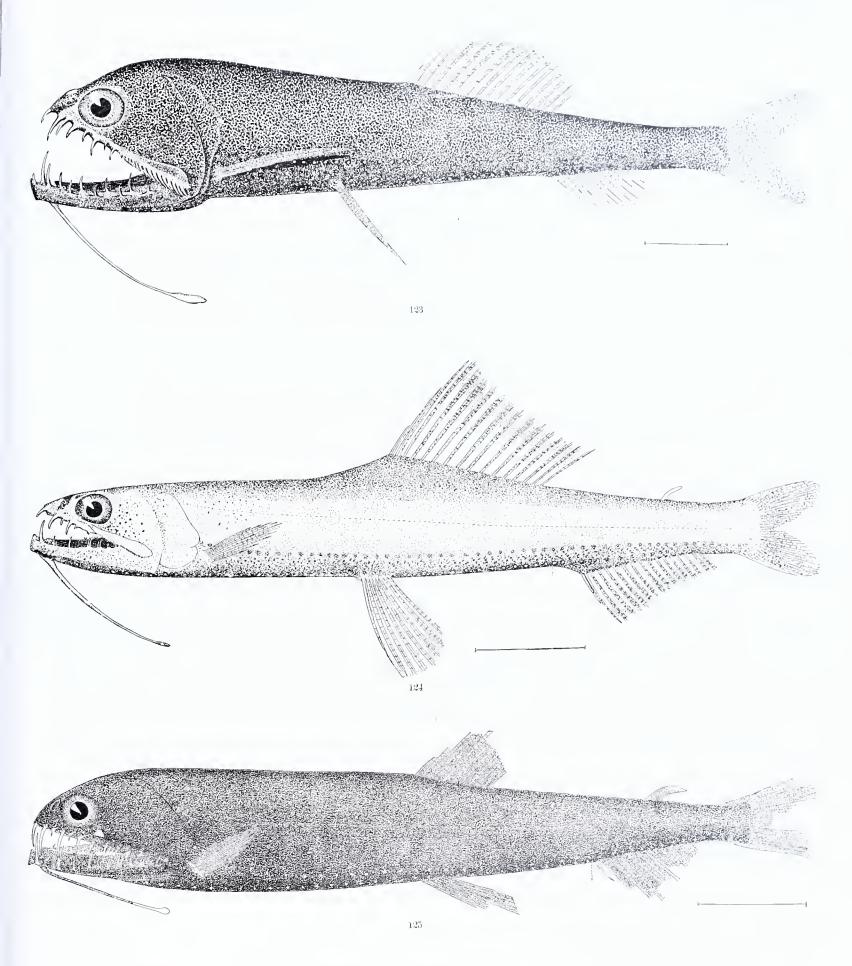




119. Cyclothone elongata. (p. 101.) 121. Yarrella Blackfordi. (p. 103.)

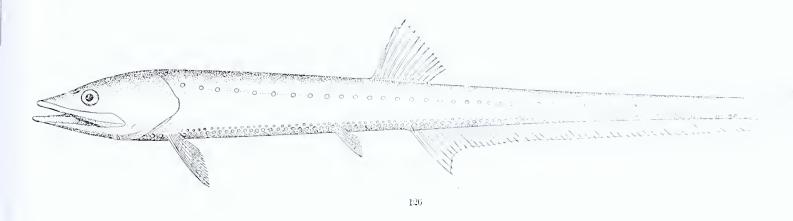
120. Bonapartia pedaliota. (p. 102.) 122. Photichthys argenteus. (p. 104.)

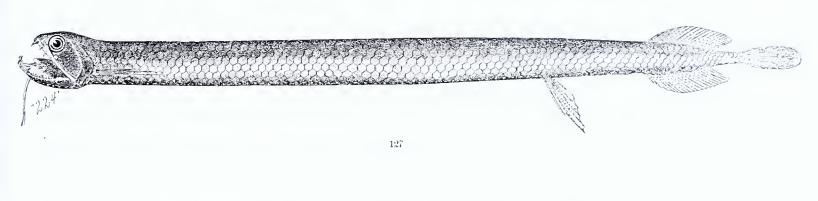


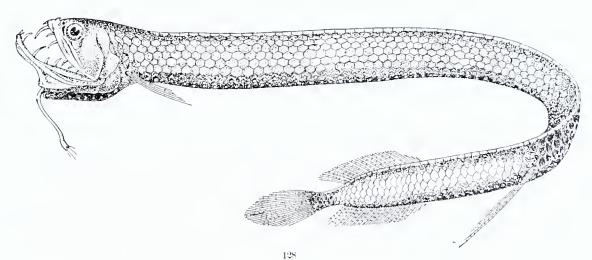


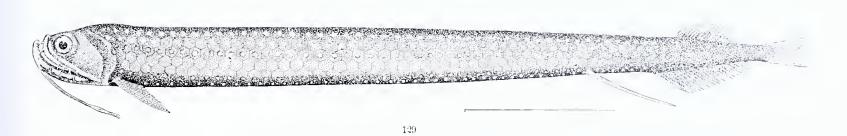
123. Astronesthes niger. (p. 105.) 124. Astronesthes gemmifer. (p. 105.) 125. Astronesthes Richardsonii. (p. 106.







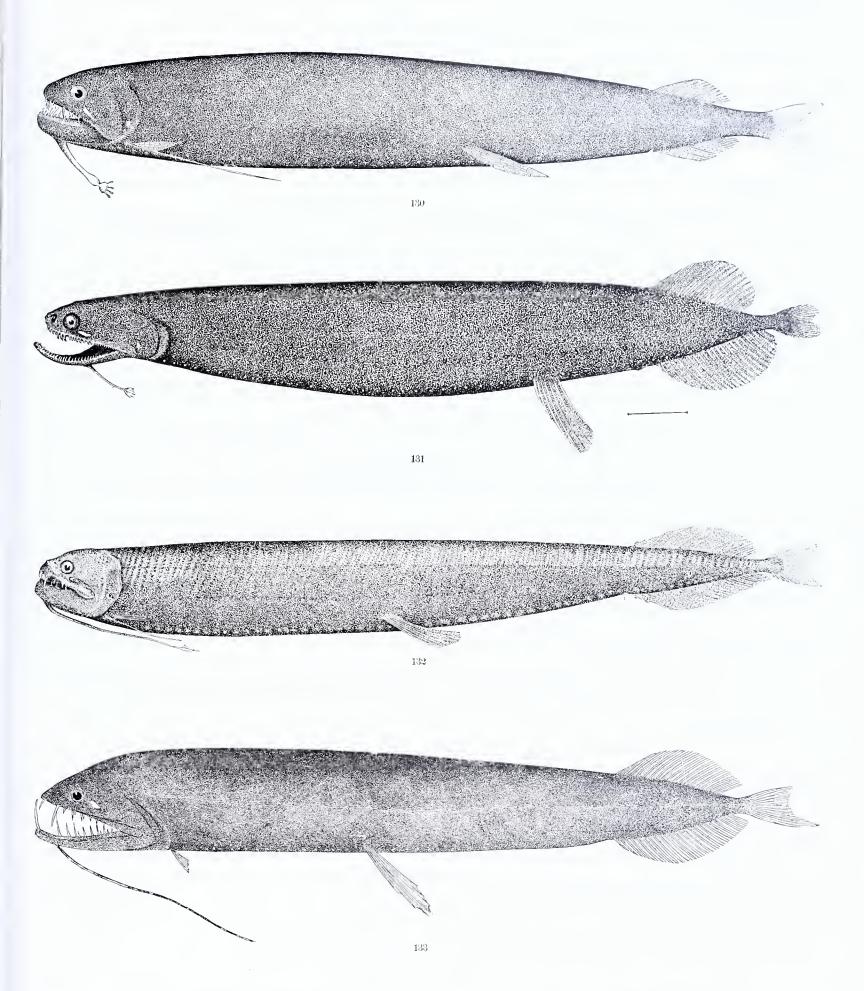




126. Diplophos т.enia. (р. 104.) 128. Stomias вол. (р. 108.)

127. STOMIAS FEROX. (p. 107.) 129. STOMIAS AFFINIS. (p. 108.)

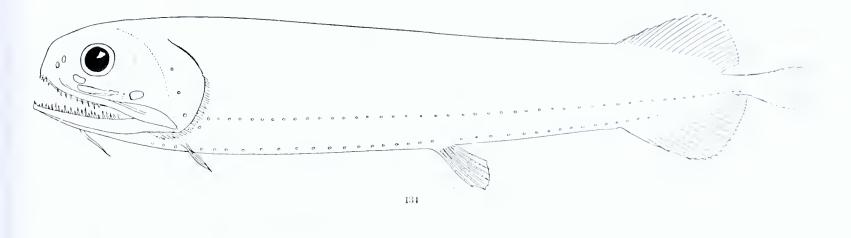


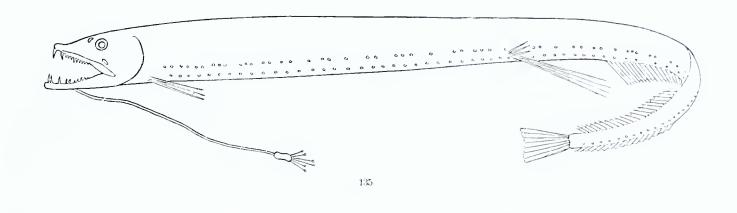


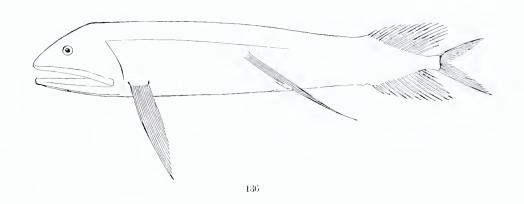
130, Echiostoma barbatum. (p. 109.) 132, Opostomias micripnus. (p. 110.)

131. Echiostoma margarita. (p. 109.) 133. Grammatostomias dentatus. (p. 110.)



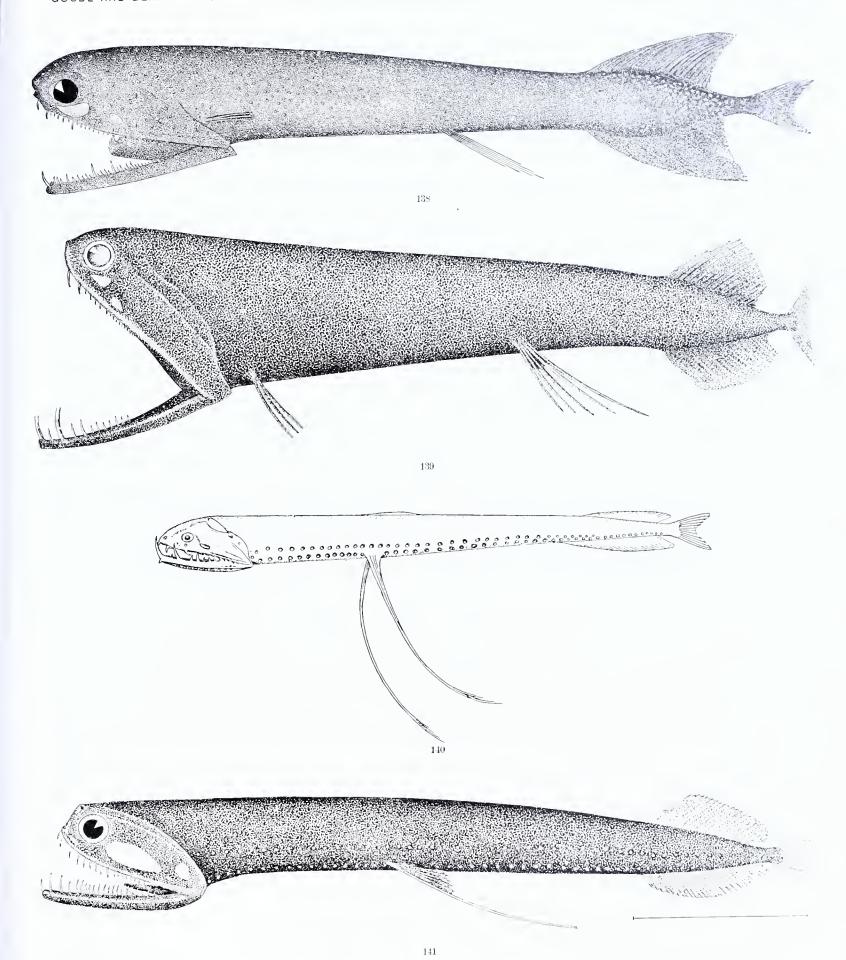








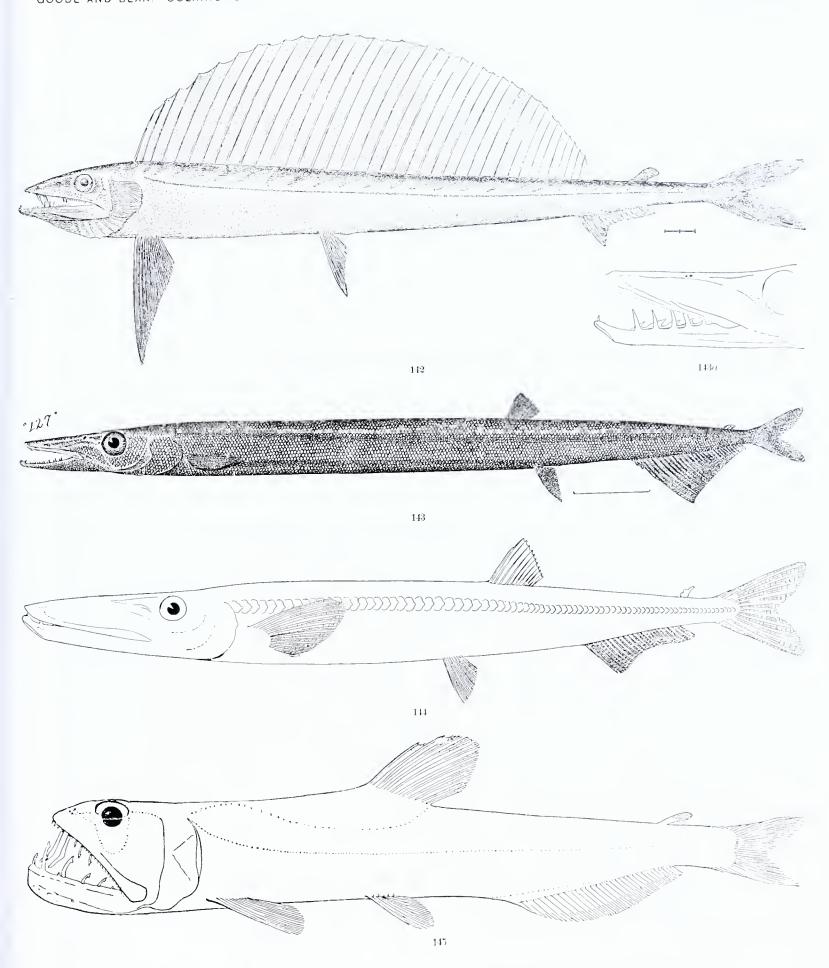




138. Malacosteus niger. (p. 114.) 140. Photostomias Guernel. (p. 115.)

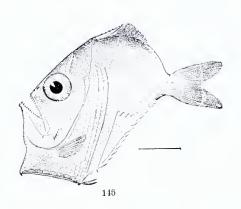
139. Malacosteus choristodactylus. (p. 111.) 141. Thaumatostomias atbox. (p. 115.)





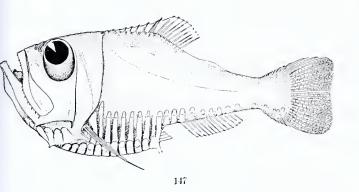
142. Alepisaurus ferox. (p. 117.)
143. Paralepis borealis. (p. 119.)
144. Sudis hyalina. (p. 121.)
145. Odoxtostomus hyalinus. (p. 121.)

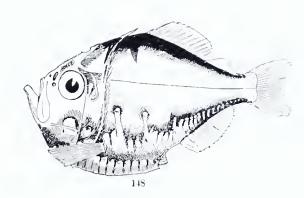


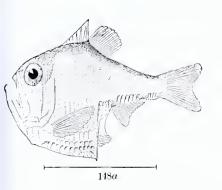


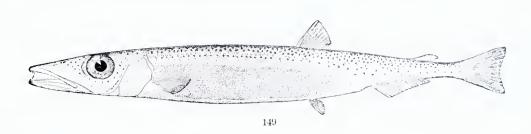


146b





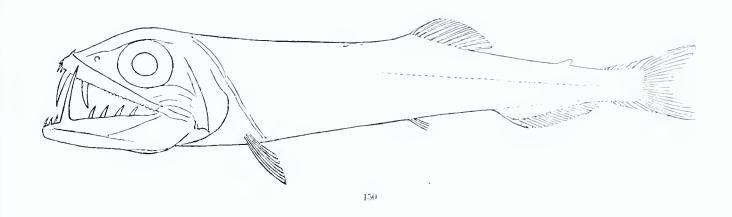


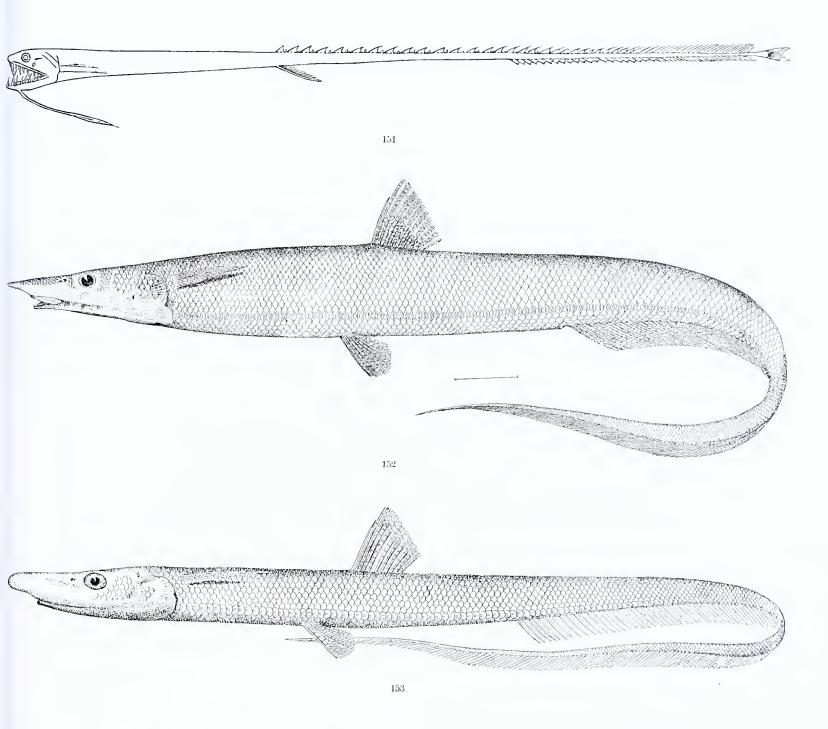


146, 146b. Sternoptyx diaphana. (p. 124.)
148. Polyipnus spinosus. (p. 128.)
149. Paralepis coregonoides. (p. 119.)

147. Argyropelecus hemigymnus. (p. 126.) 148a. Argyropelecus Olfersh. (p. 126.)



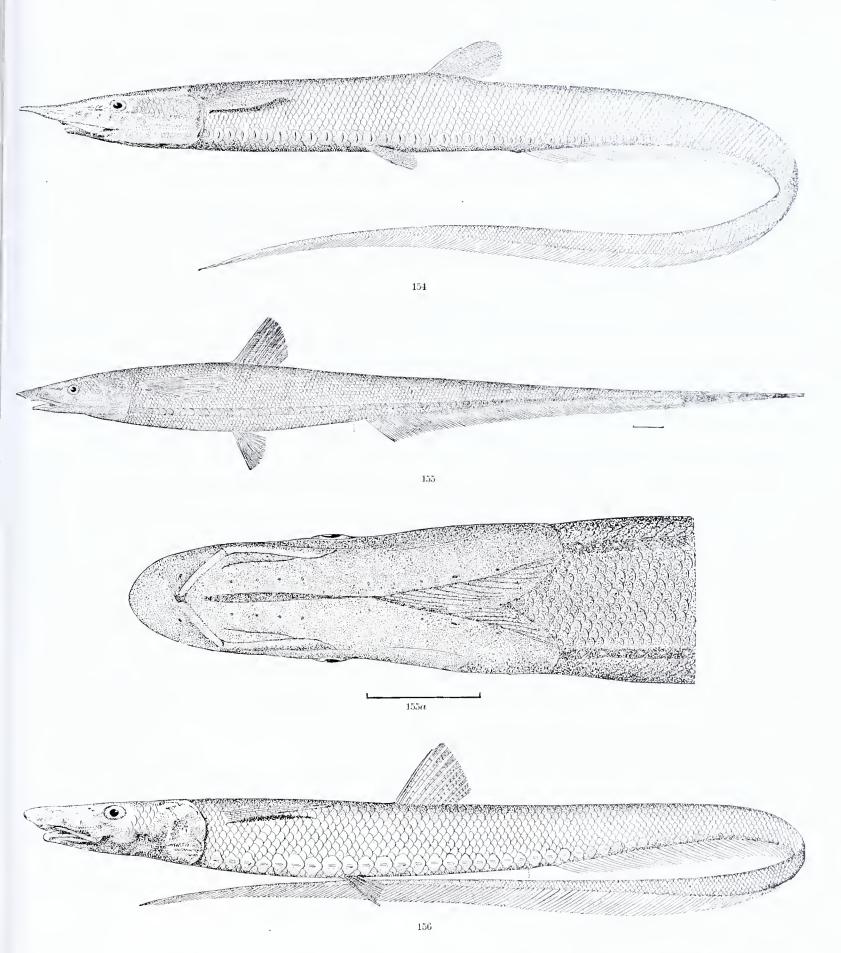




150. Omosudis Lowii. (p. 122.) 152. Halosaurus Oweni. (p. 130.)

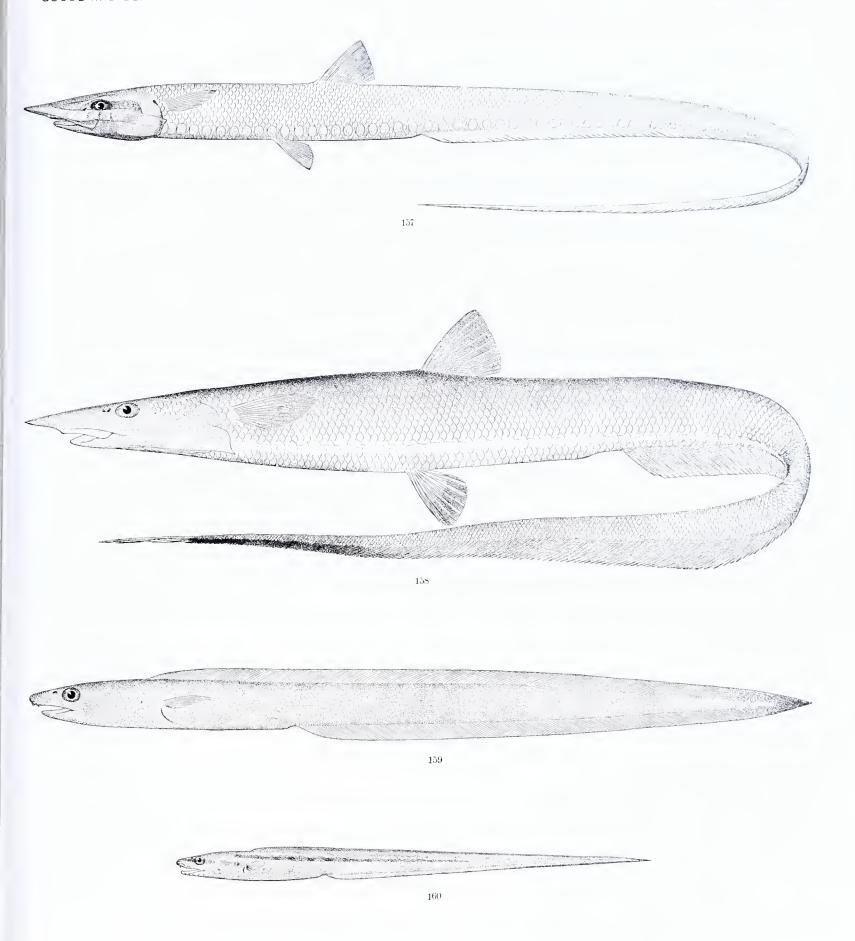
154. Idiacanthus ferox. (p. 129.) 153. Halosaurus Johnsonianus. (p. 131.)





154. Aldrovandia rostrata. (p. 132.) 155, 155a. Aldrovandia macrochira. (p. 133.) 156. Aldrovandia phalacrus. (p. 134.)

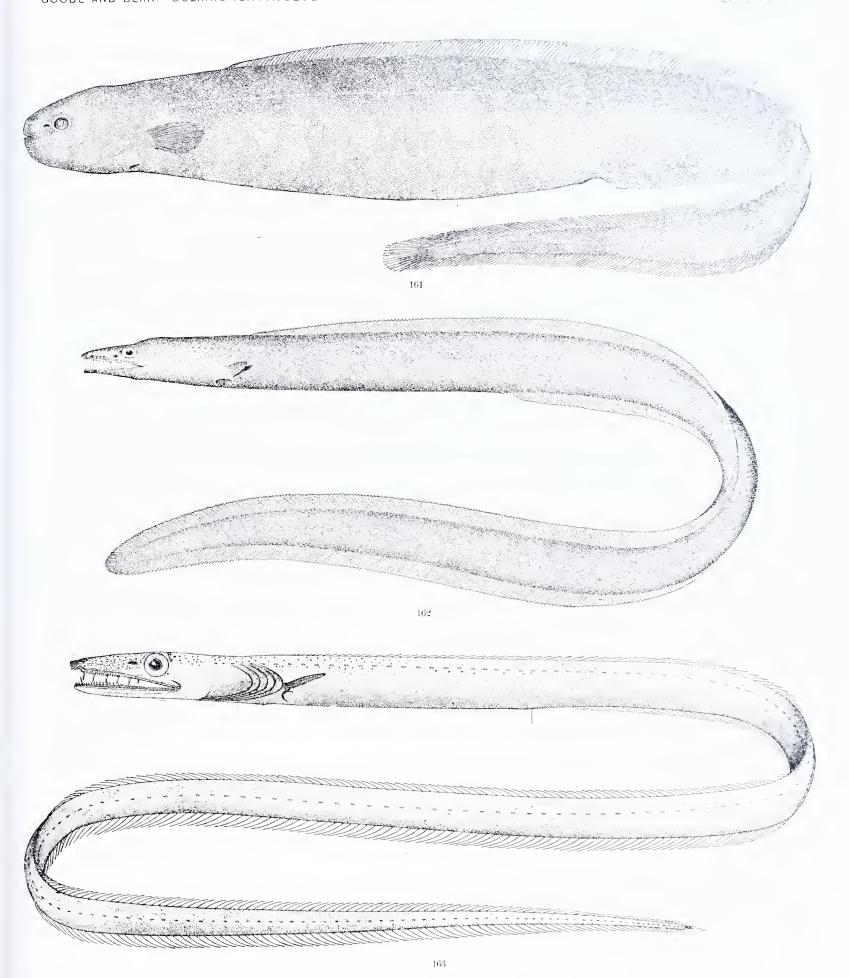




157. Aldrovandia gracilis. (p. 134.) 159. Congermuræna flava. (p. 138.)

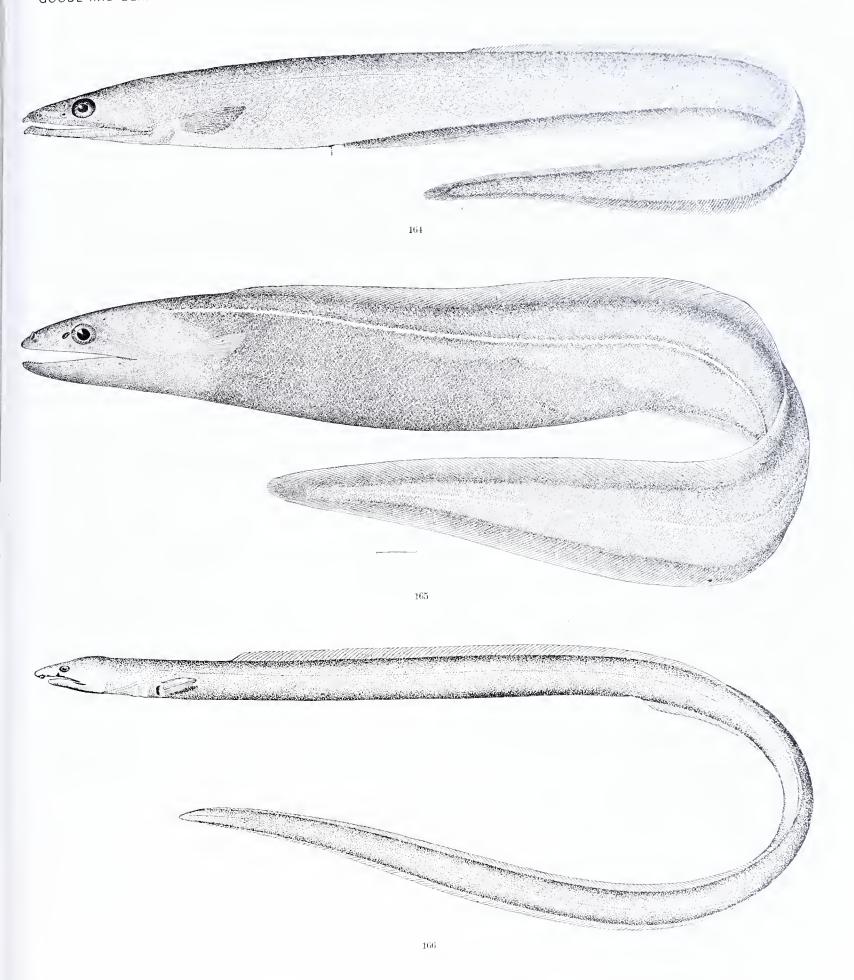
158. Aldrovandia Pallida. (p. 135.) 160. Uroconger vicinus. (p. 138.)





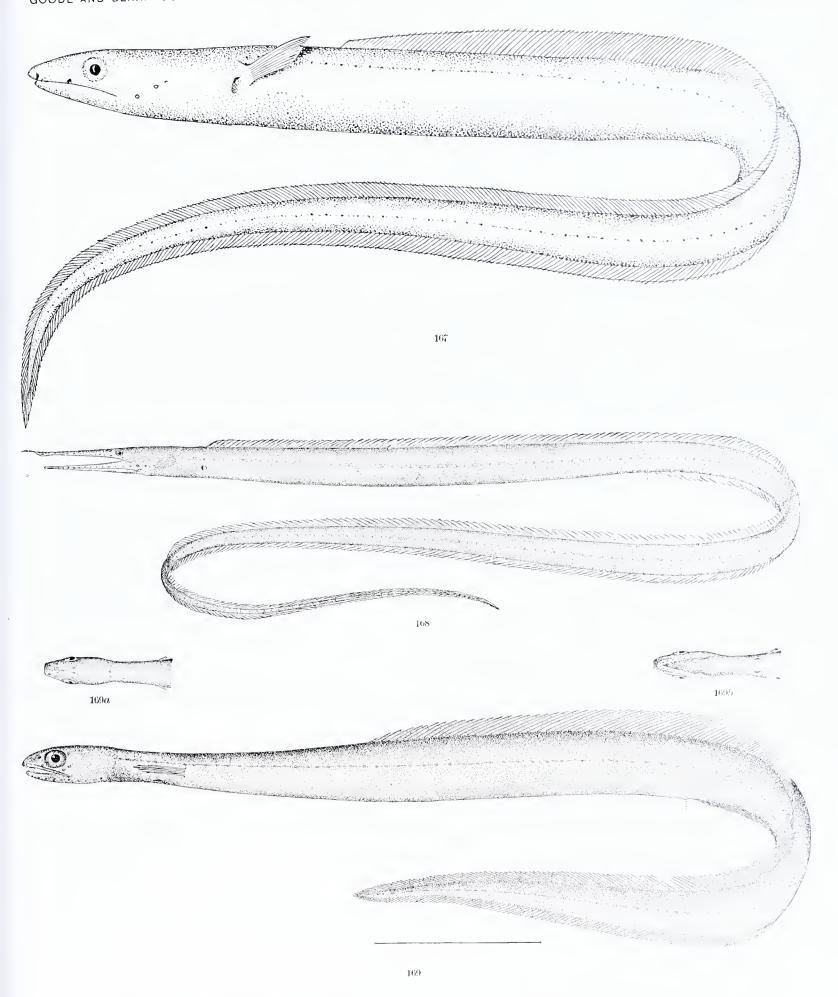
161. Simenchelys parasiticus. (p. 139.) 163. Hoplunnis diomedianus. (p. 141.)





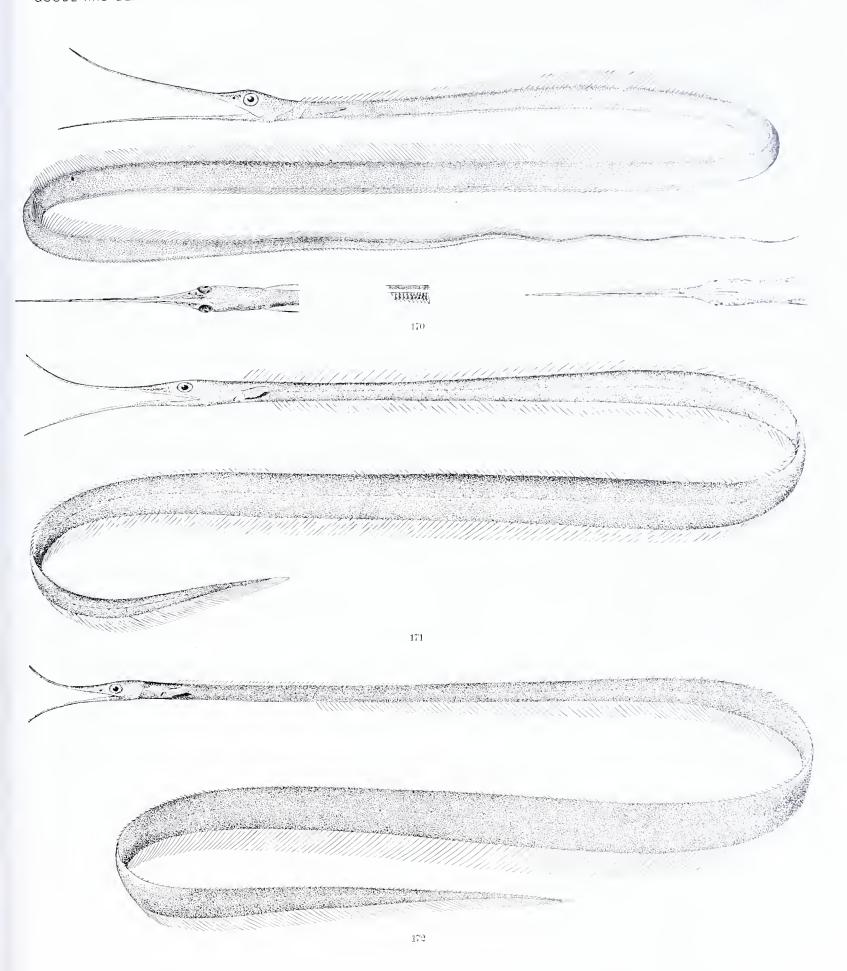
164. Synaphobranchus pinnatus. (p. 143.) 165. Histiobranchus infernalis. (p. 145.) 166. Pisoodonophis cruentifer. (p. 147.)





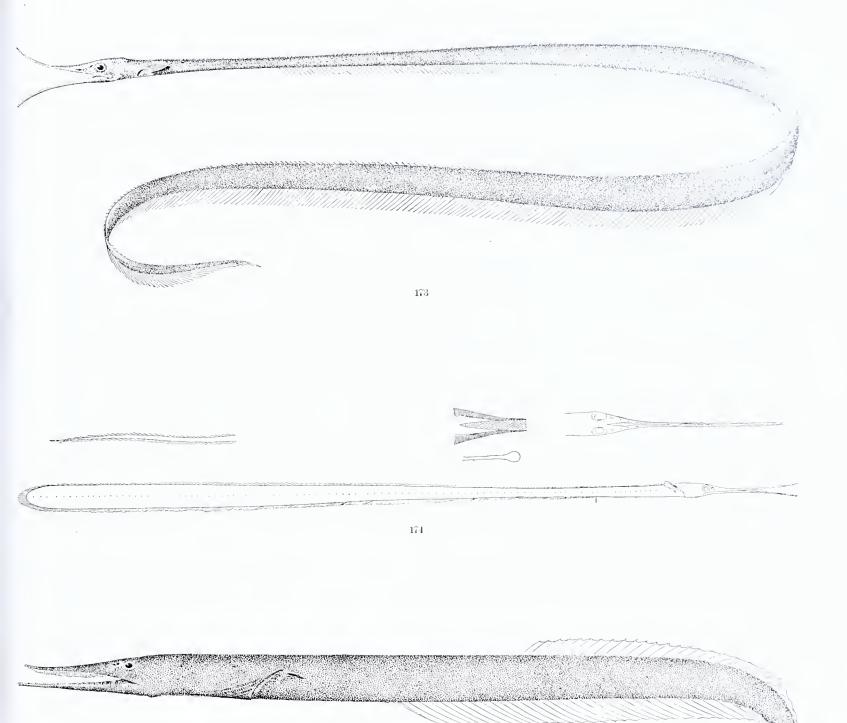
167. Myrus pachyrhynchus. (p. 148.) 169, 169*a*, *b*, Derichthys serpentinus. (p. 161.)





170. Nemichthys scolopaceus. (p. 152.) 171. Labichthys carinatus. (p. 153.) 172. Labichthys elongatus. (p. 153.)



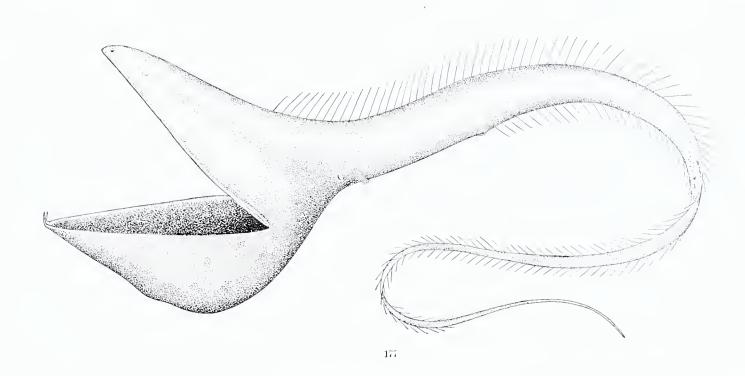


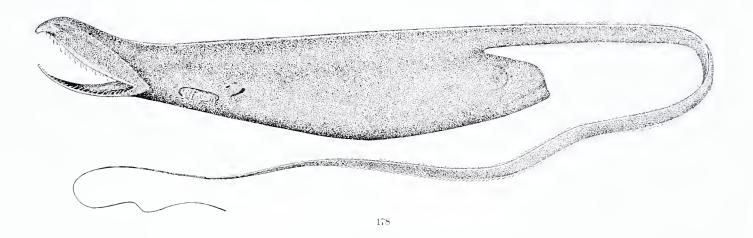
173, Labichthys infans, (p. 153,)

174. Labichthys anfans (after Günther). (p. 153.) 175. Serrivomer Beann. (p. 155.)



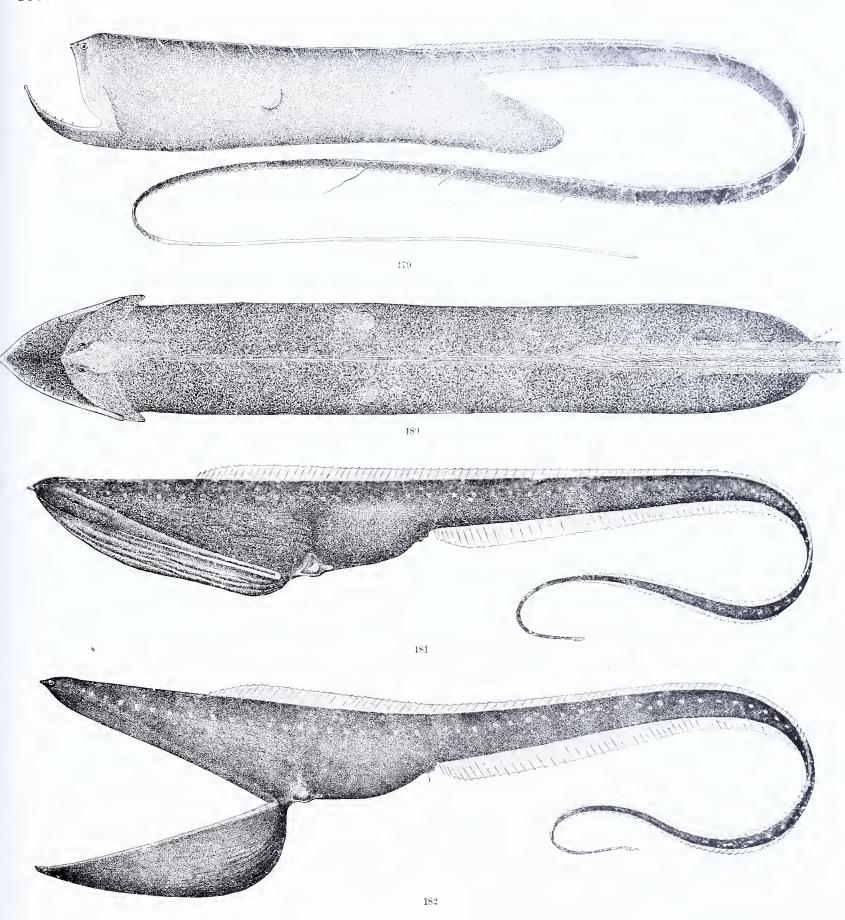






176. Cyema atrum. (p. 154.) 177. Eurypharynx pelecanoides, (p. 157.) 178. Saccopharynx flagellum. (p. 159.)

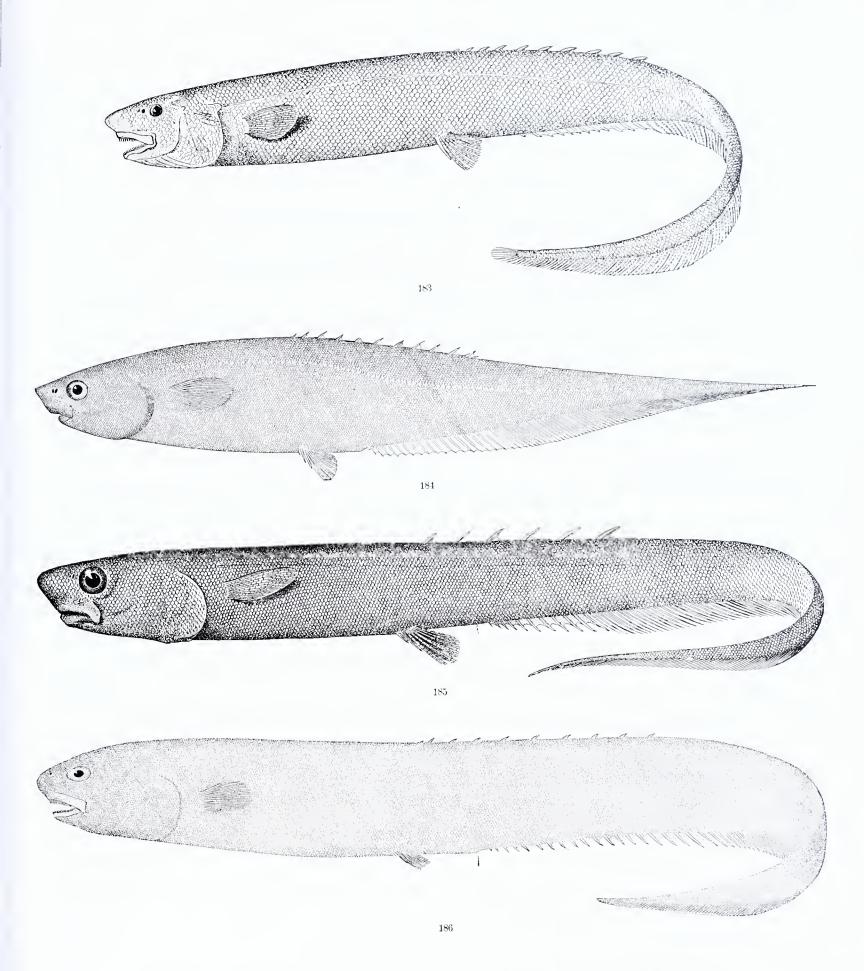




179, 180. Saccopharynx flagellum. (p. 157.)

181, 182. Gastrostomus Bairdii. (p. 159.)

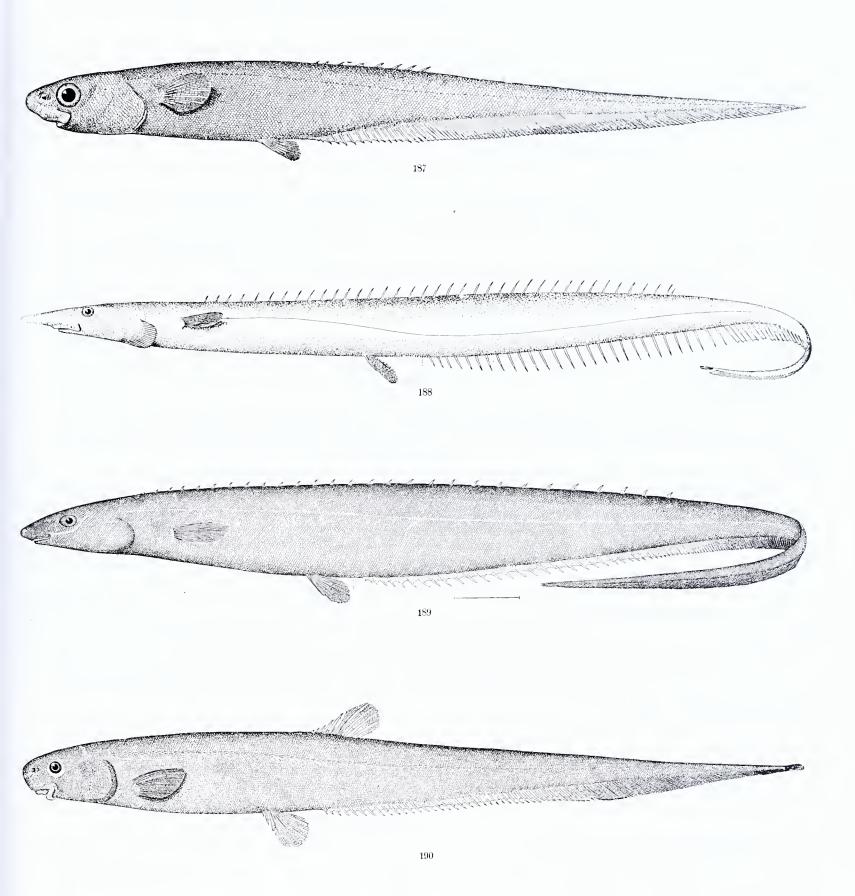




183. Notacanthus nasus. (p. 164.) 185. Notacanthus Bonaparth. (p. 166.)

184. Notacanthus analis. (p. 165.) 186. Notacanthus phasganorus. (p. 167.)

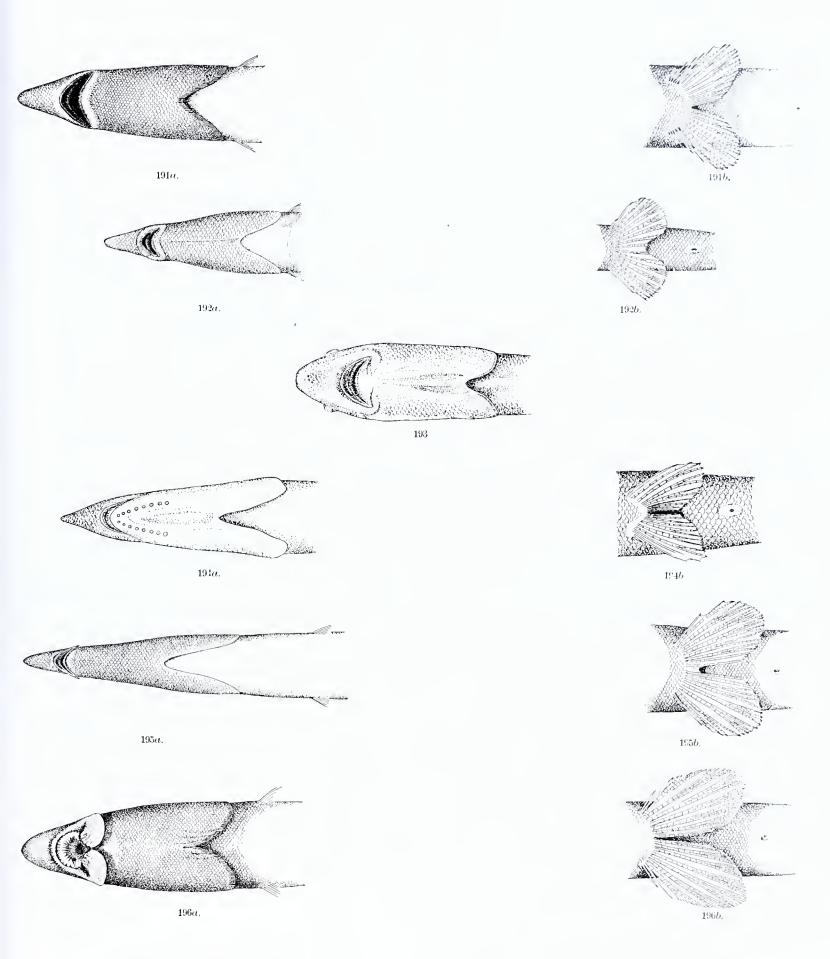




187. GIGLICLIA MOSELEYI. (p. 169.) 189. MACDONALDIA ROSTRATA. (p. 171.)

188. Polyacanthonotus rissoanus. (p. 170.) 190. Lipogenys Gillii. (p. 173.)

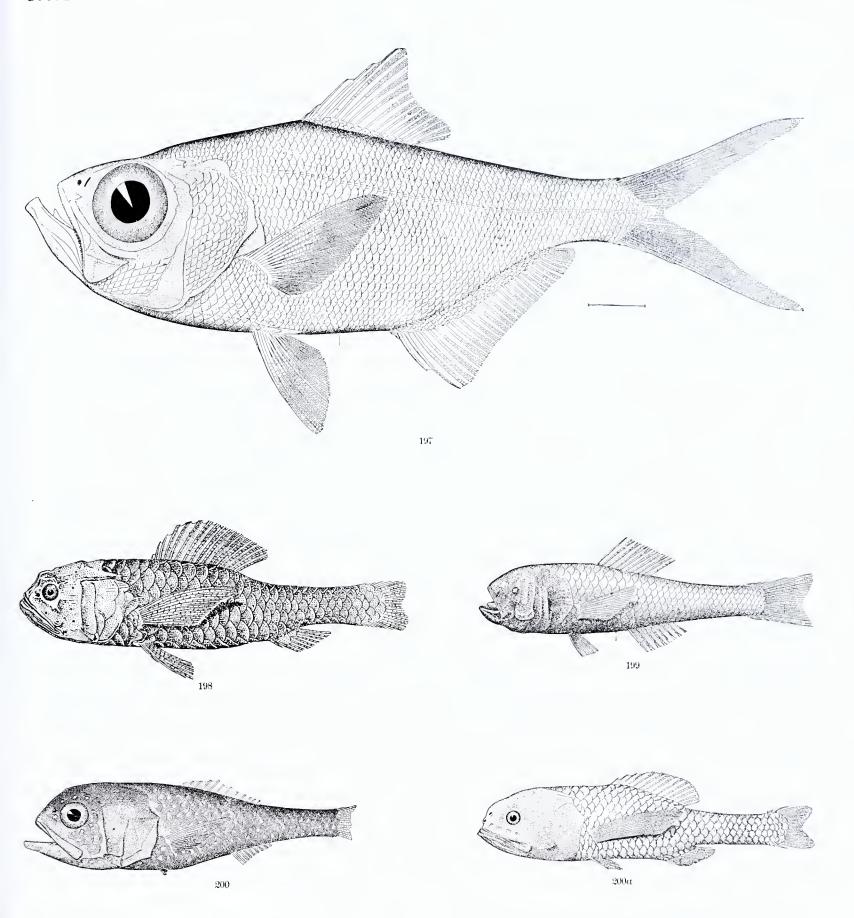




191*a*, *b*. Notacanthus analis. (p. 165.) 193. Gigliolia Moseleyi. (p. 169.) 195*a*, *b*. Macdonaldia Rostrata. (p. 171

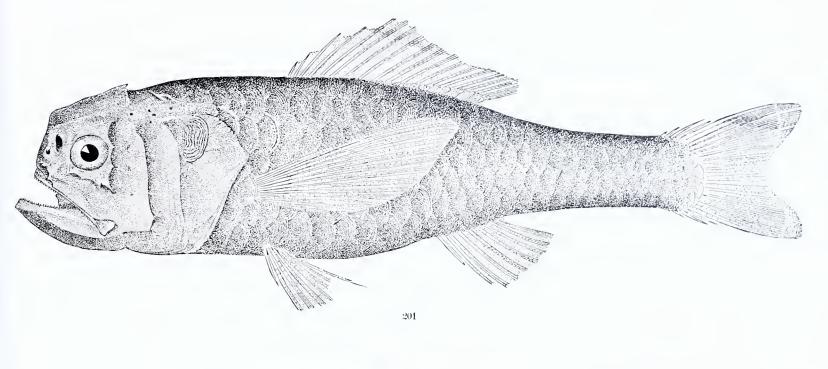
192a,b. Notacanthus sexspinis. (p. 163.) 194a,b. Polyacanthionotus rissoanus. (p. 170.) 196a,b. Lipogenys Gillii. (p. 173.)

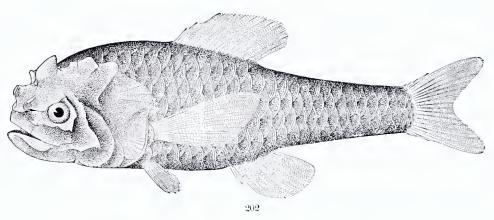


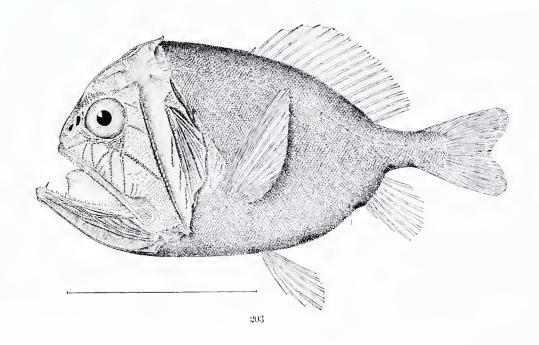


197. Beryx splendens. (p. 176.)
199. Scopelogadus cocles. (p. 182.)
200a. Plectromus crassiceps. (p. 180.)
(p. 180.)



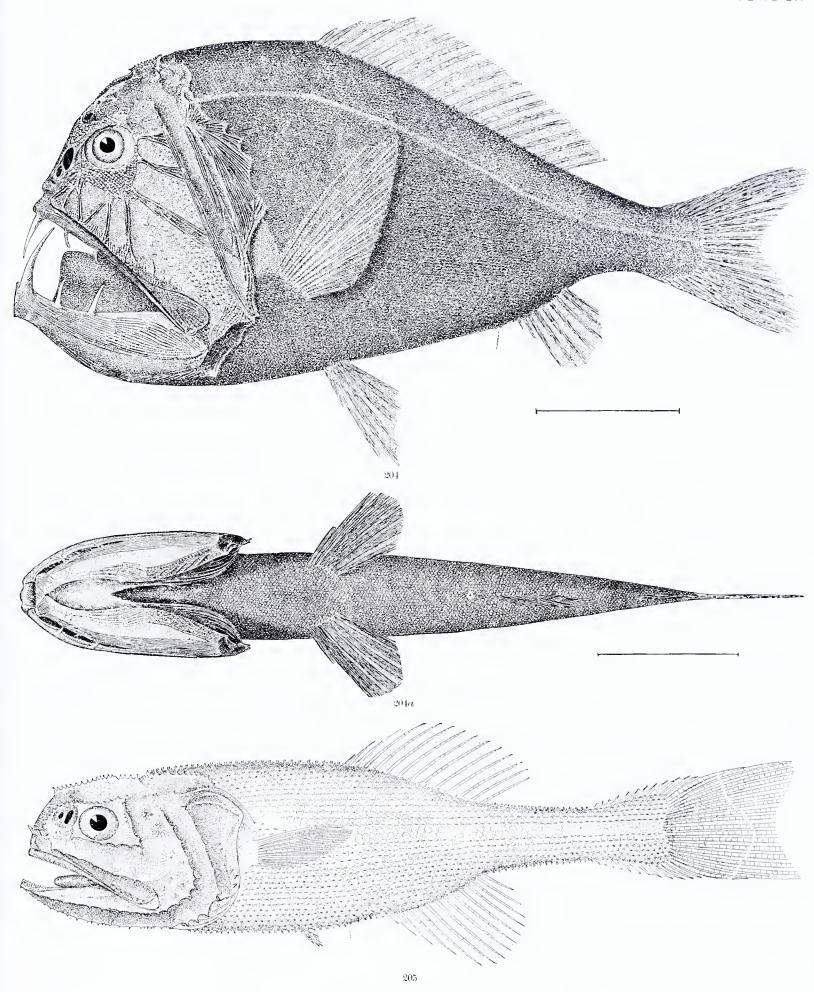






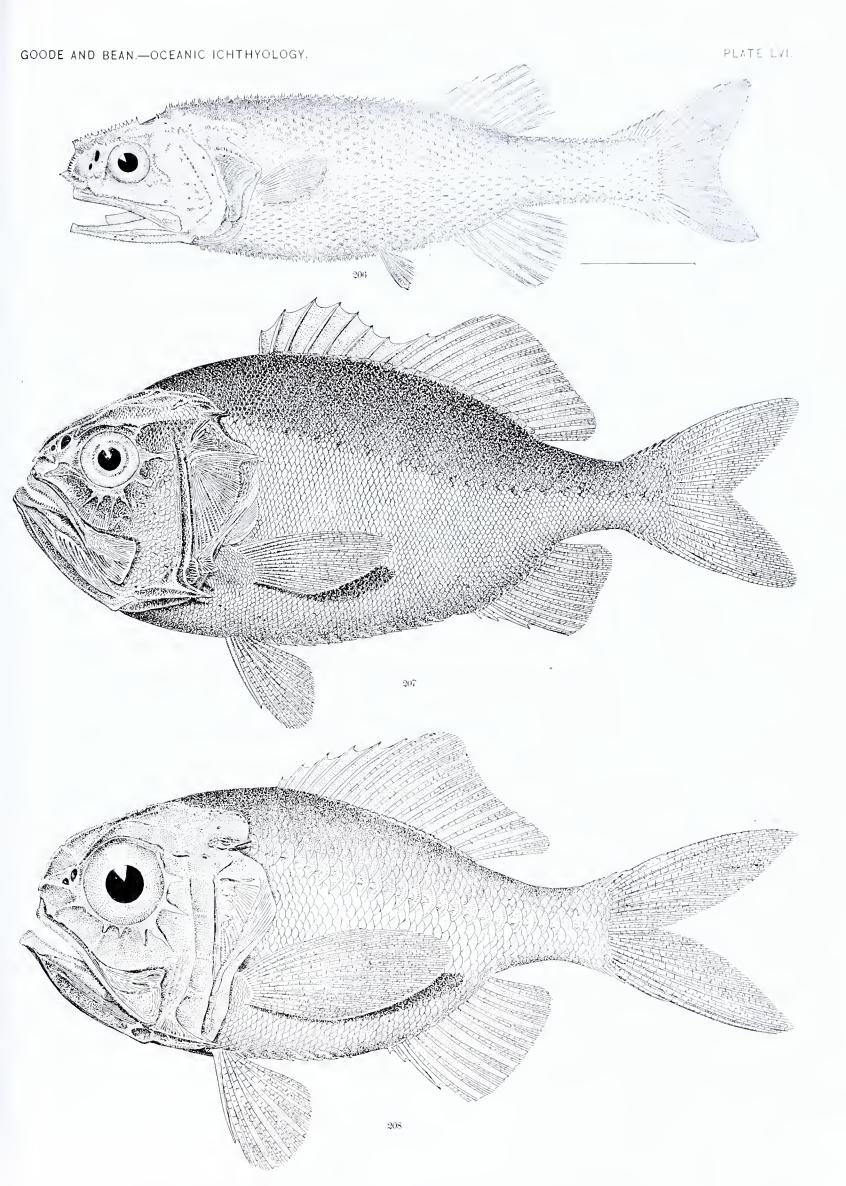
201. Plectromus suborbitalis. (p. 179.) 203. Anoplogaster cornutus. (p. 184.)





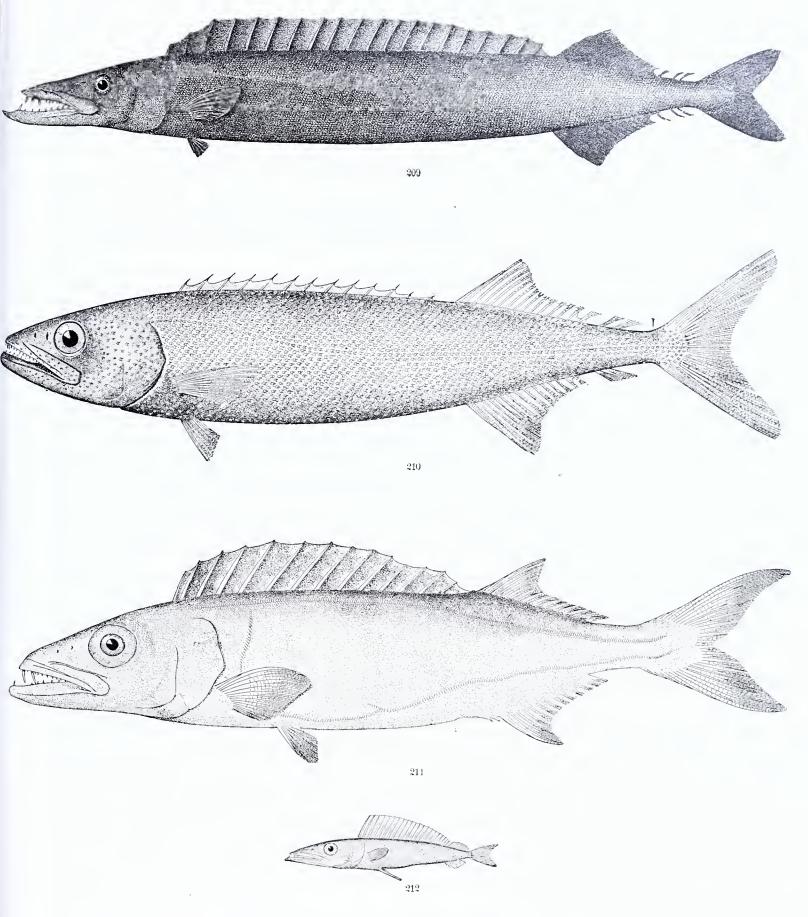
204, 204*a*. Caulolepis longidens. (p. 185.) 205, Stephanoberyx monæ. (p. 186.)





206. Stephanoberyx Gilli. (p. 187.) 207. Trachichthys Darwini. (p. 188.) 208. Hoplostethus mediterraneus. (p. 189.)

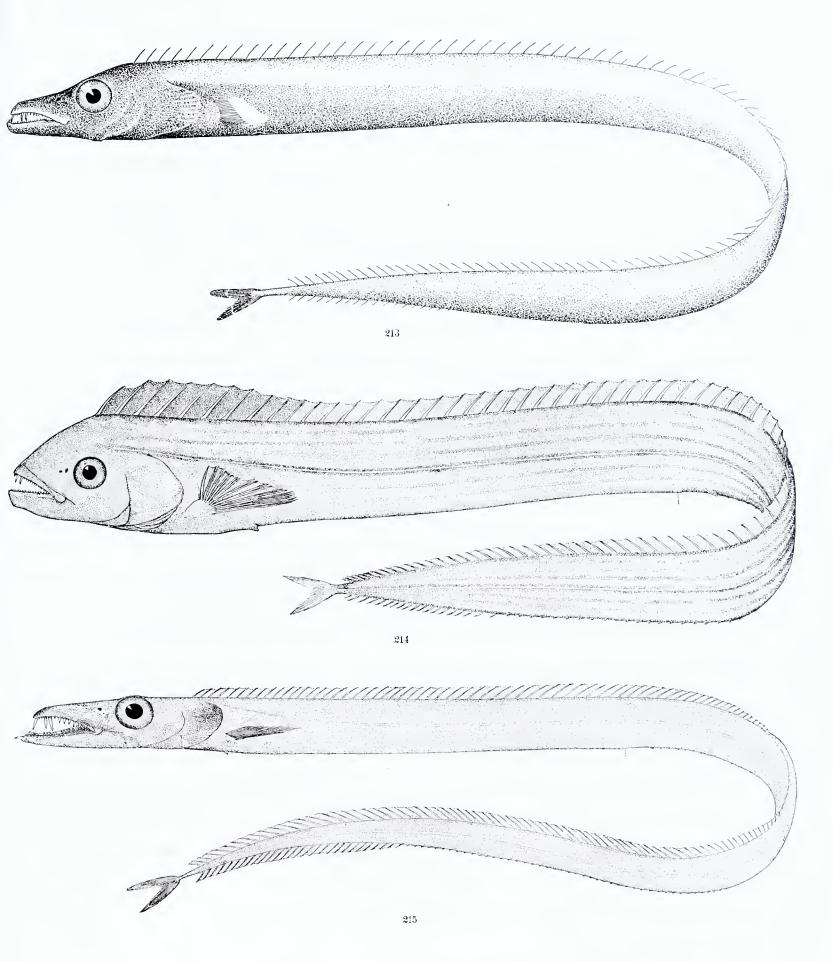




209. Thyrsitops violaceus. (p. 195.) 211. Epinnula magistralis. (p. 198.)

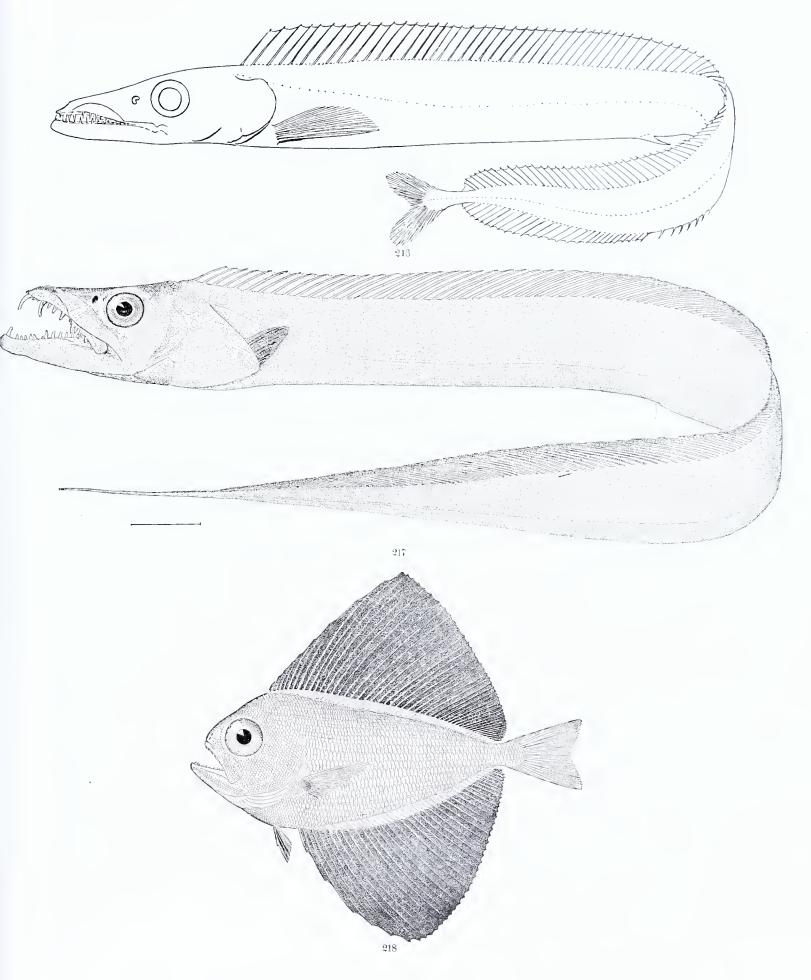
210. Ruvettus pretiosus. (p. 196.) 212. Dicrotus parvipinnis. (p. 201.)





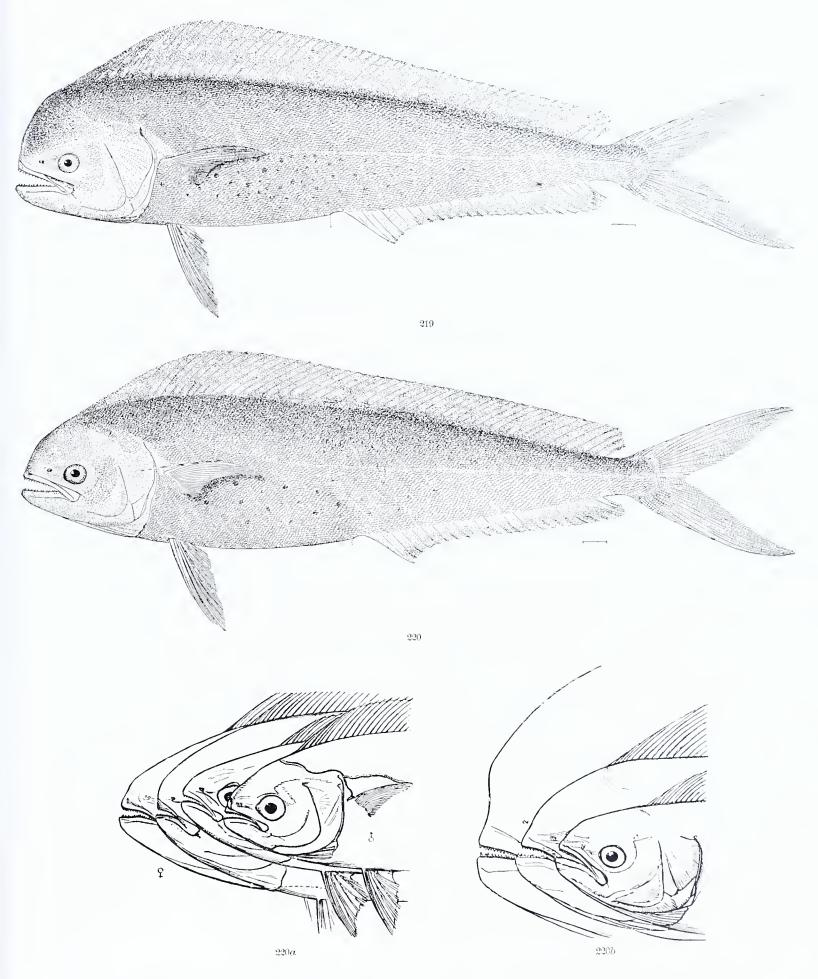
213. Lepidopus caudatus. (p. 203.) 214. Evoxymetopon tæniatus. (p. 204.) 215. Benthodesmus atlanticus. (p. 205.)





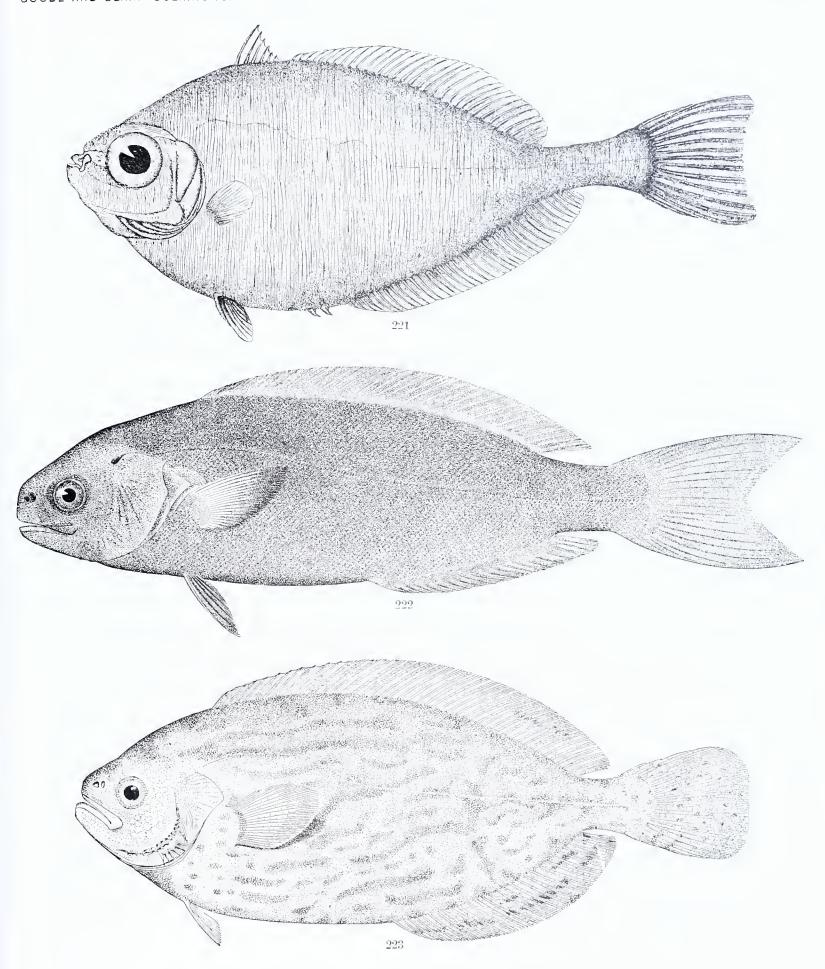
**216.** Aphanopus carbo. (p. 207.) 218. Pteraclis carolinus. (p. 212.) (p. 208.)





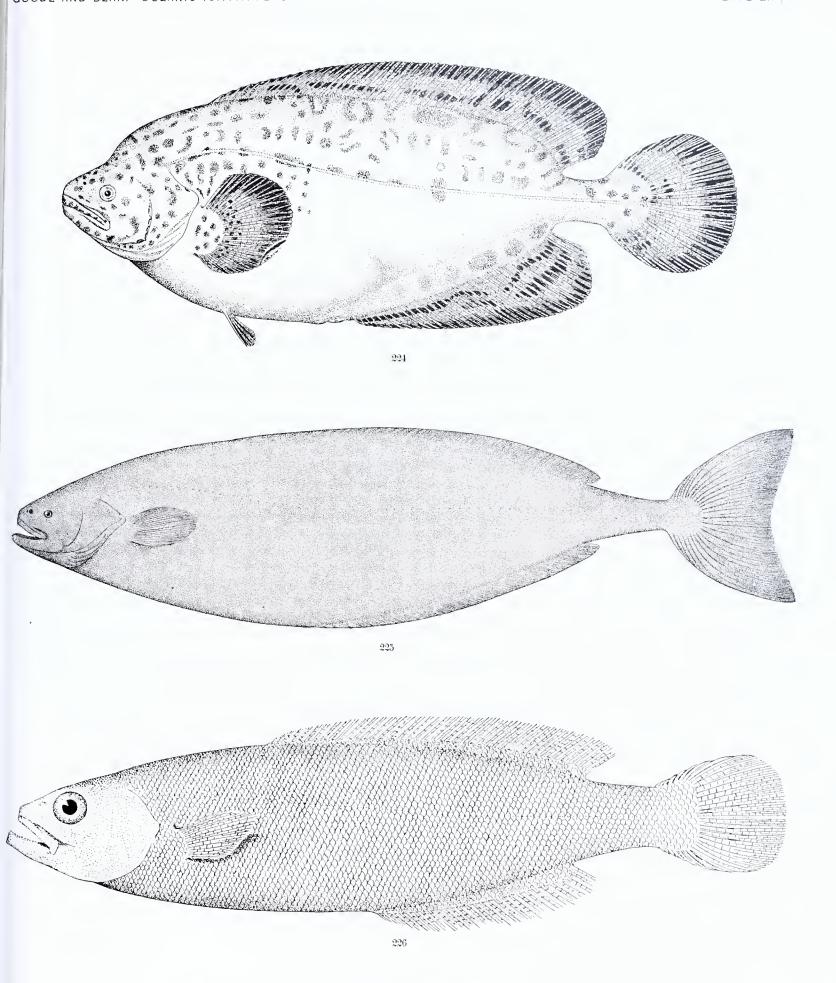
**219.** Сокурнжла пррикиз (old male). (р. 209.) 220. Сокурнжла пррикиз (young). (р. 209.) 220*a*, *b*. Сокурнжла пррикиз. (р. 209.)





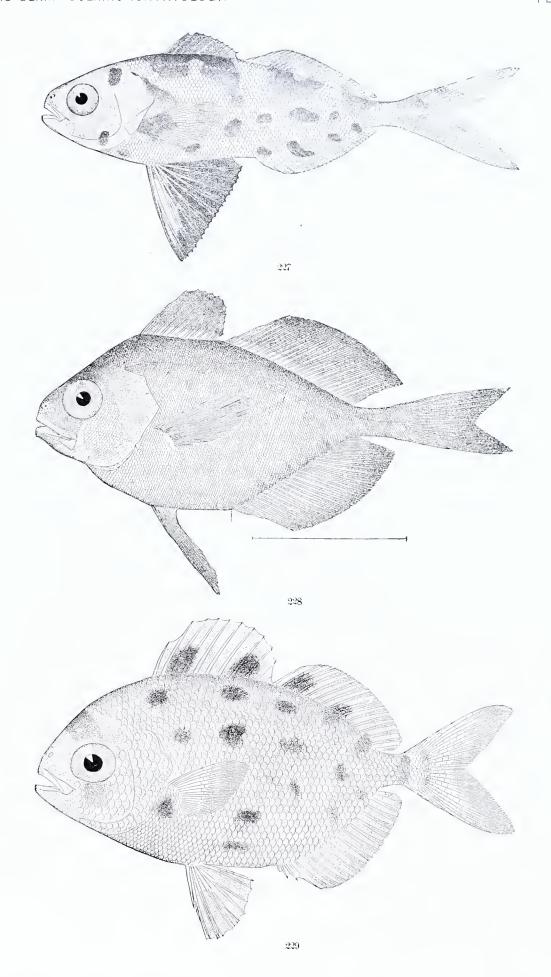
221. Grammicolepis brachiusculus. (p. 218.) 222. Centrolopius pompilus. (p. 214.) 223. Schedophilus medusophagus. (p. 214.)





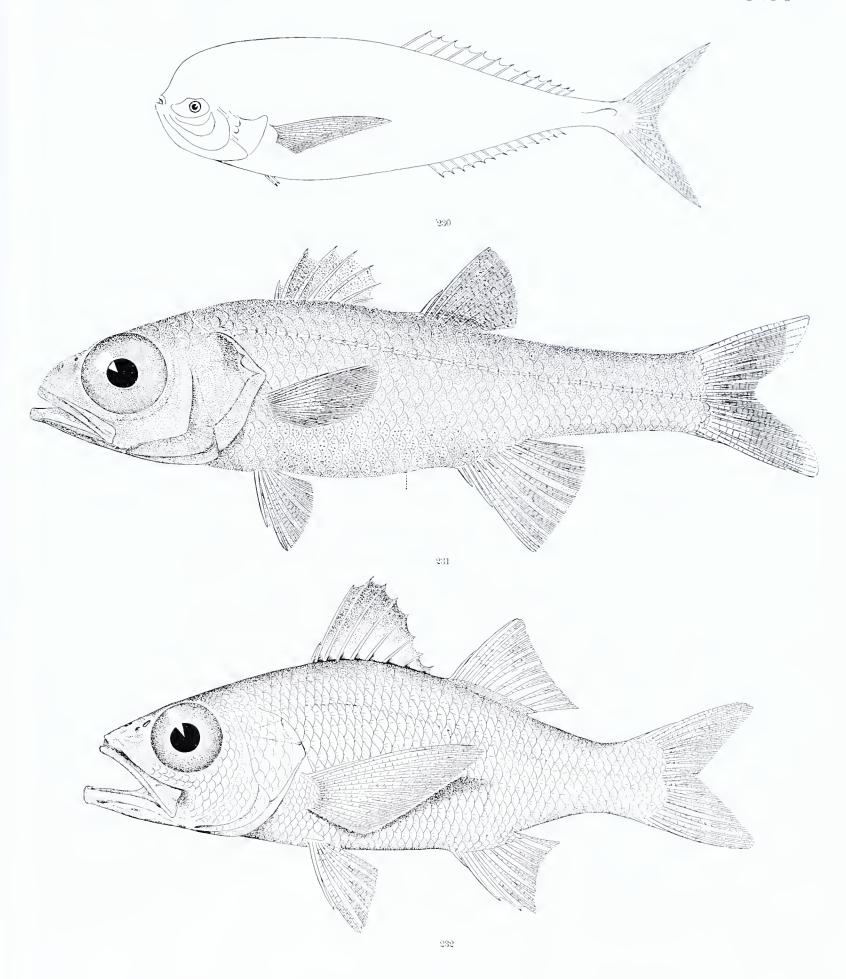
224. Icosteus enigmaticus. (p. 215.) 225. Acrotus Willoughbyl. (p. 217.) (p. 216.)





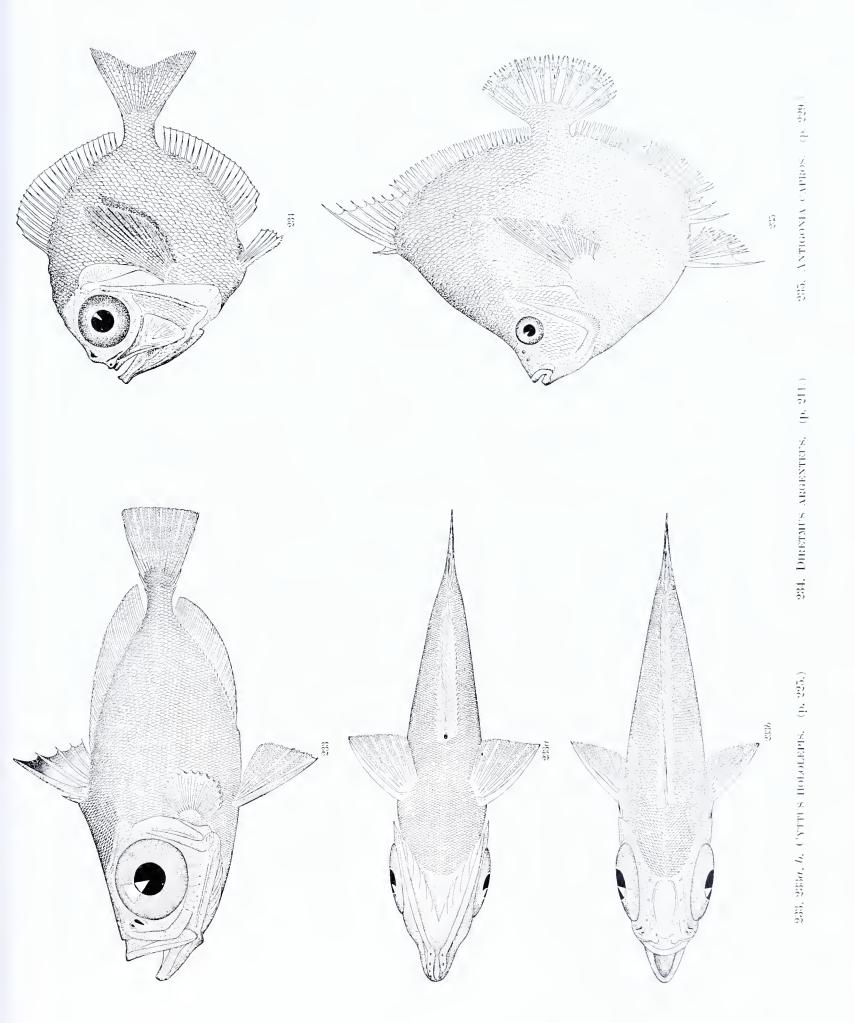
227. Nomeus Gronovii. (p. 220.) 228. Psenes pellucidus. (p. 221.) 229. Psenes maculatus. (p. 221.)



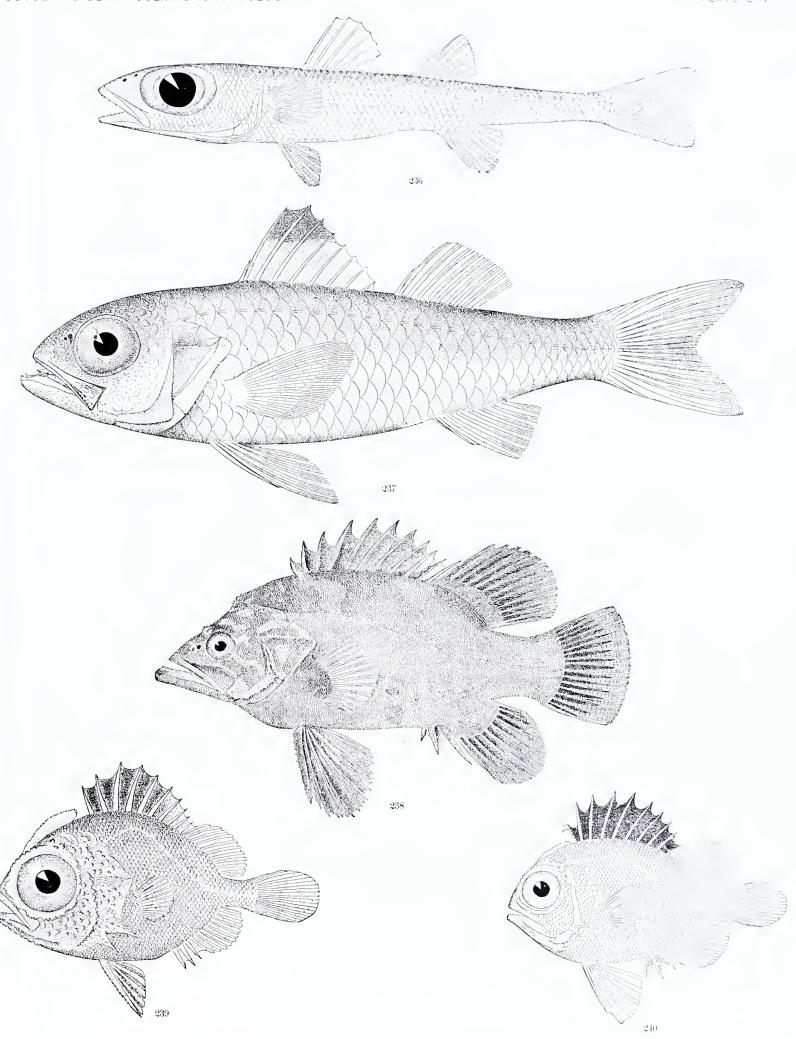


230. Luvarus imperialis. (p. 222.) 232. Verilus sordidus. (p. 240.)





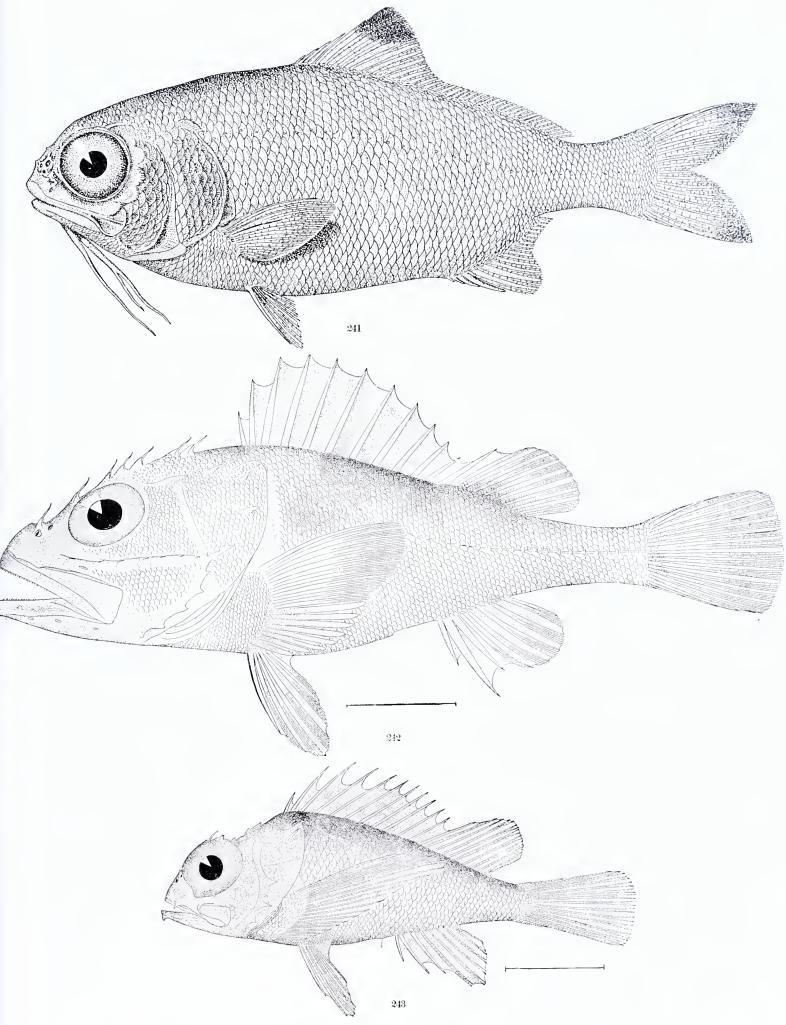




236. Epigonus occidentalis. (p. 233.) 238. Polyprion americanum. (p. 238.)

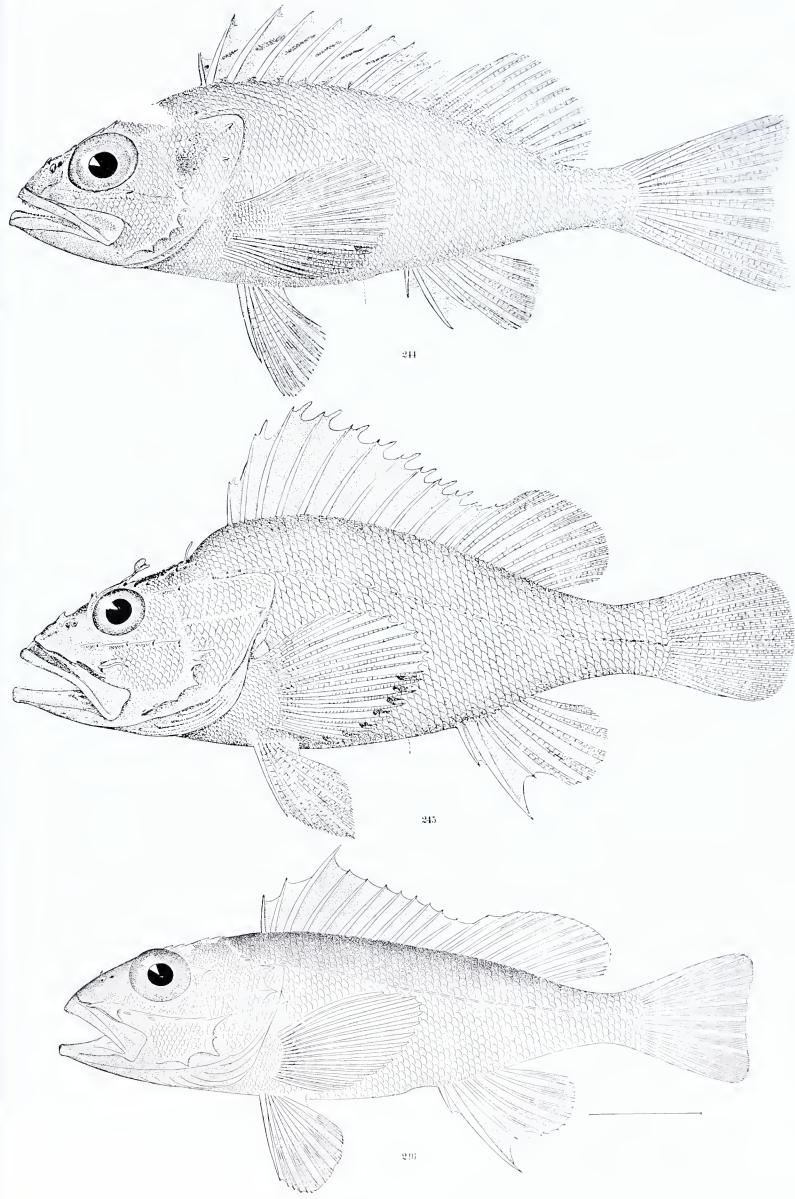
237. Hypoclydonia bella. (p. 236.) 239, 240. Pseudopriacanthus altus. (p. 242.)





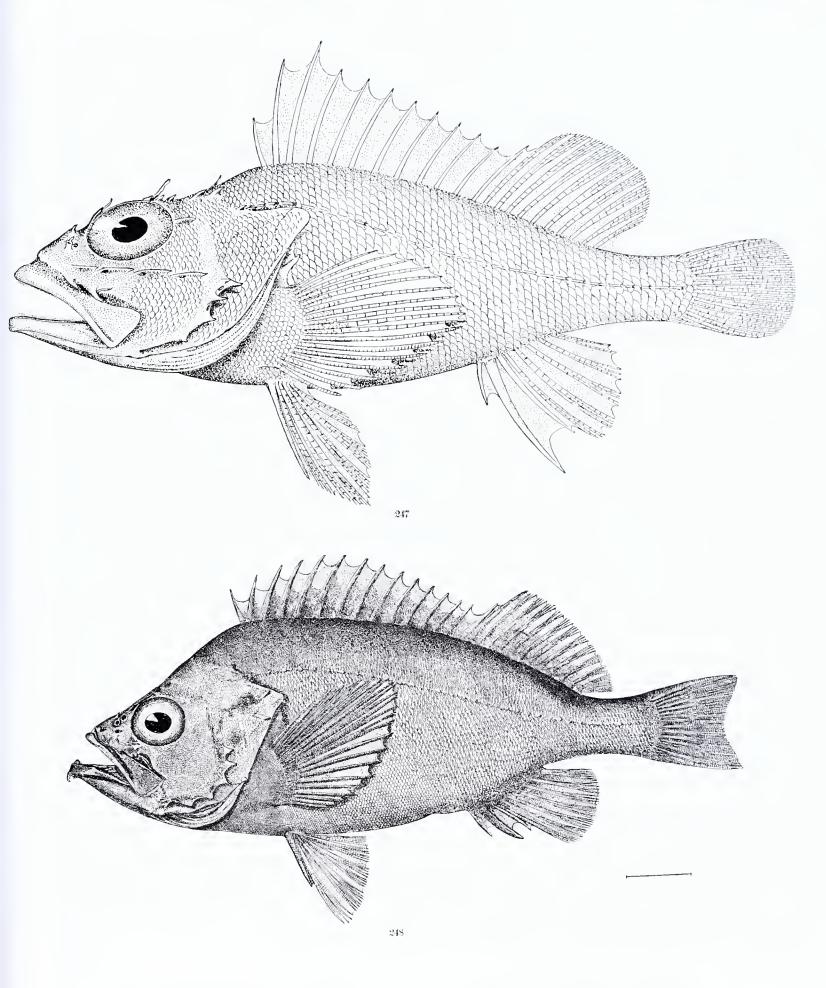
241. Polymixia nobilis, (p. 243.) 243. Scorpæna Agassizh. (p. 247.)





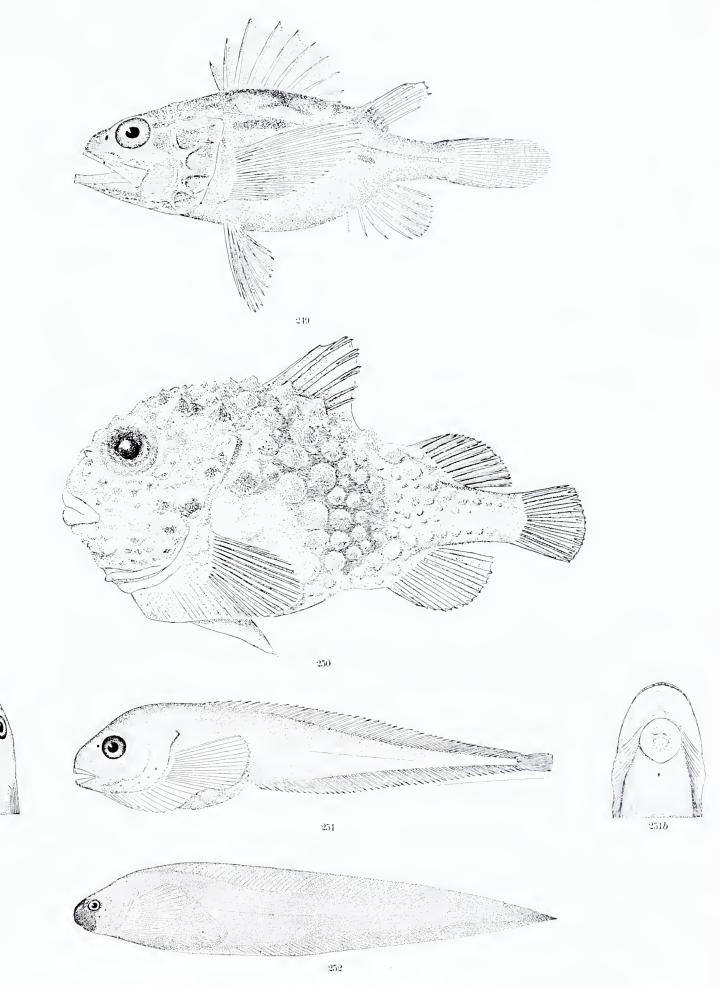
244. Helicolenus dactylopterus. (p. 250.) 245. Pontinus Rathbuni. (p. 255.) 246. Pontinus longispinis. (p. 258.)





247. Pontinus macrolepis. (p. 257.) 248. Sebastes marinus. (p. 260.)



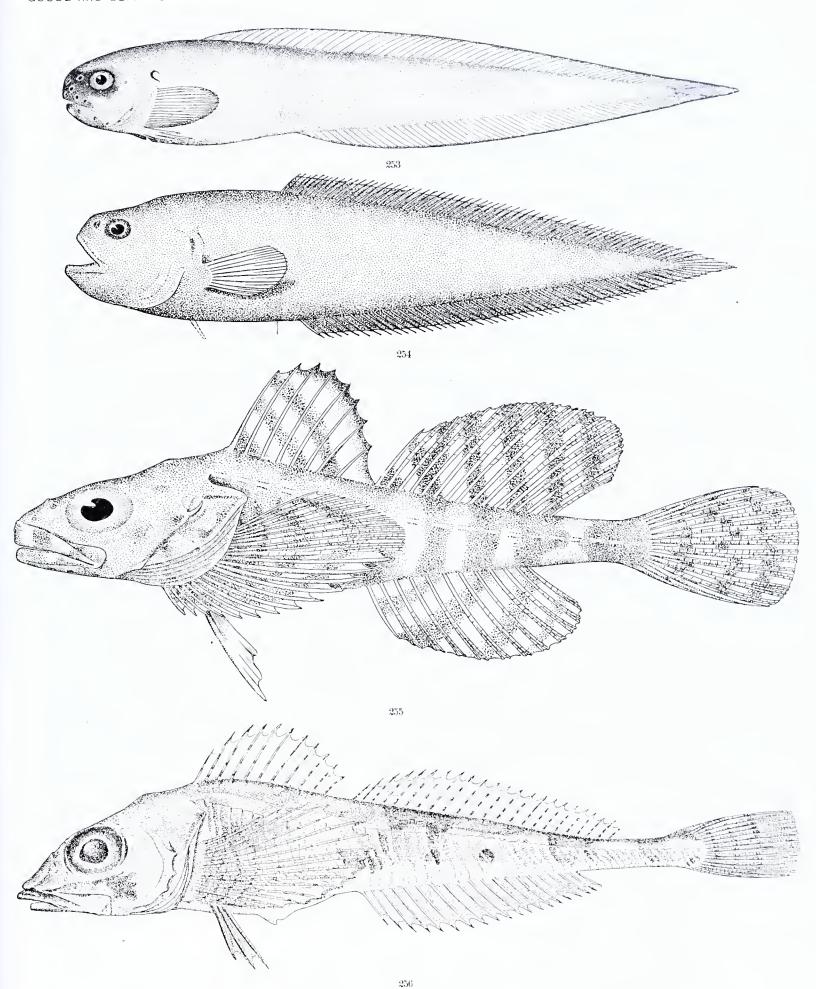


249. Setarches parmatus. (p. 264.) 251, 251*a*, *b*. Careproctus ranula. (p. 275.)

251a

250. EUMICROTREMUS SPINOSUS. (p. 272.) 252. MONOMITRA LIPARINA. (p. 278.)

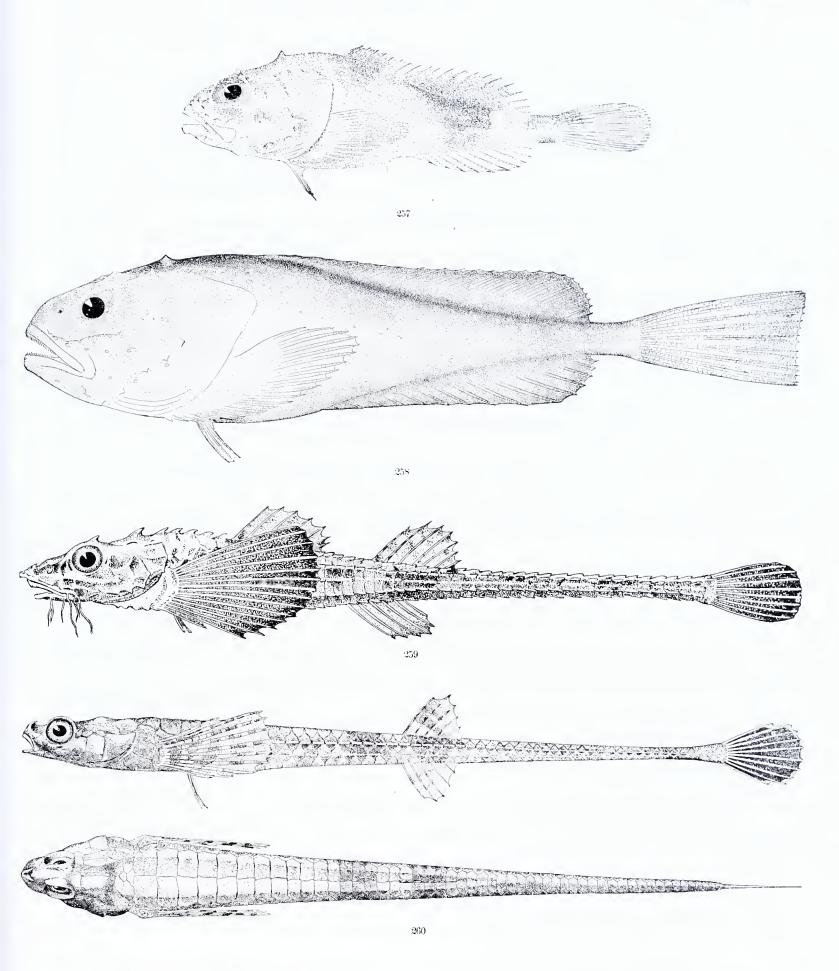




253. Paraliparis Copel. (p. 279.) 255. Artediellus uncinatus. (p. 267.)

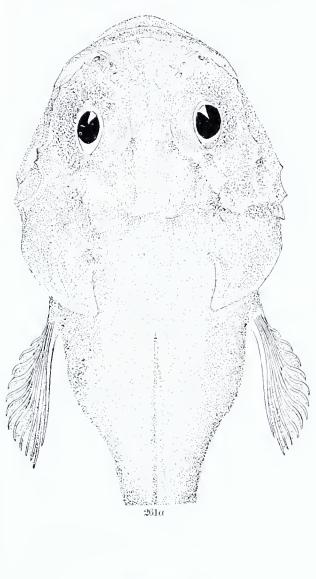
254. Gymnolycodes Edwardsi. (p. 281.) 256. Triglops pingelh. (p. 269.)

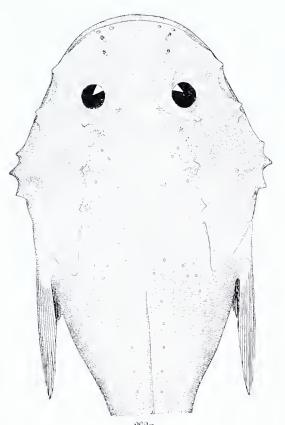




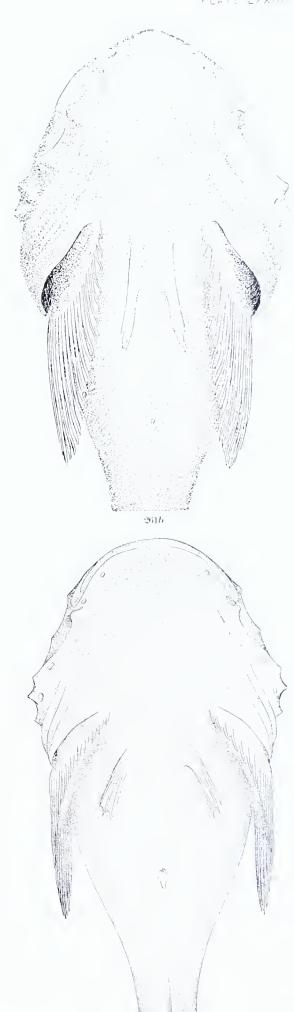
257. Cottunculus microps. (p. 269.) 258. Cottunculus Thomsonii. (p. 270.) 259. Podothecus decagonus. (p. 282.) 260. Aspidophoroides monopterygius (p. 283.)







261a, b. Cottunculus Microps. (p. 269.)



262a, b. Cottunculus Thomsonn. (р. 270.)

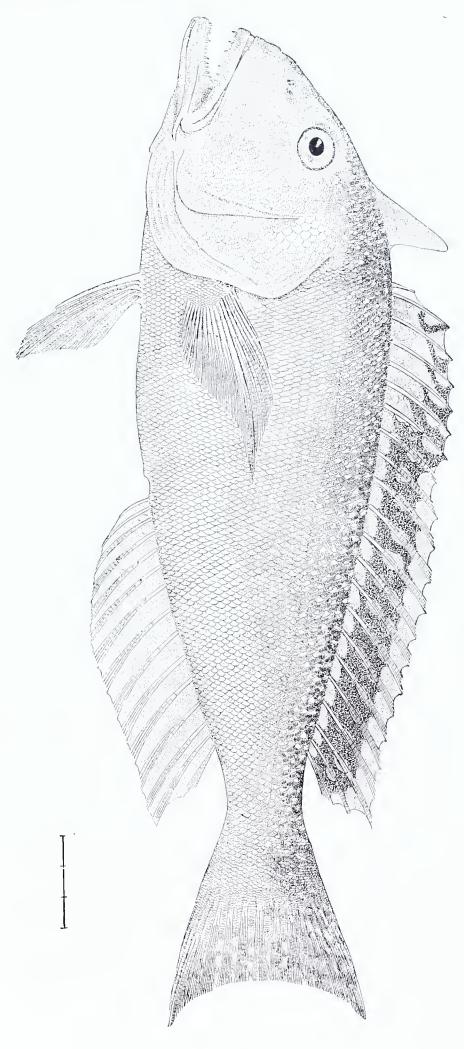




264, 264a. Chiasmodon Niger. (p. 292.)

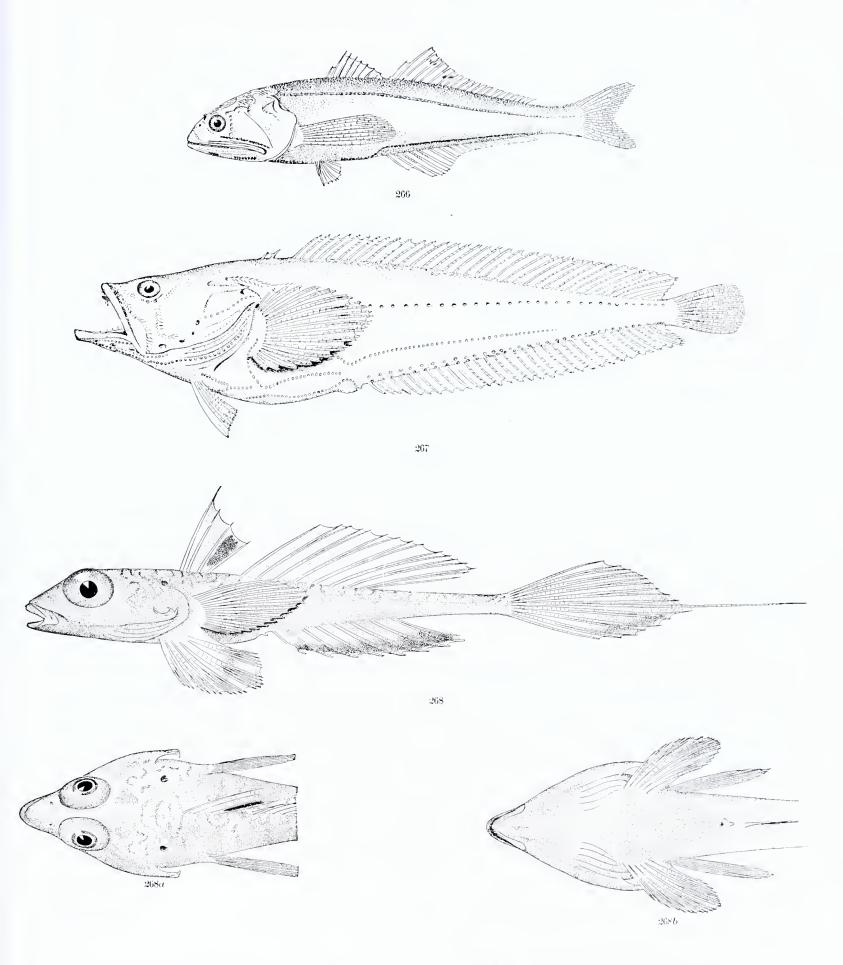
 $264\alpha$ 





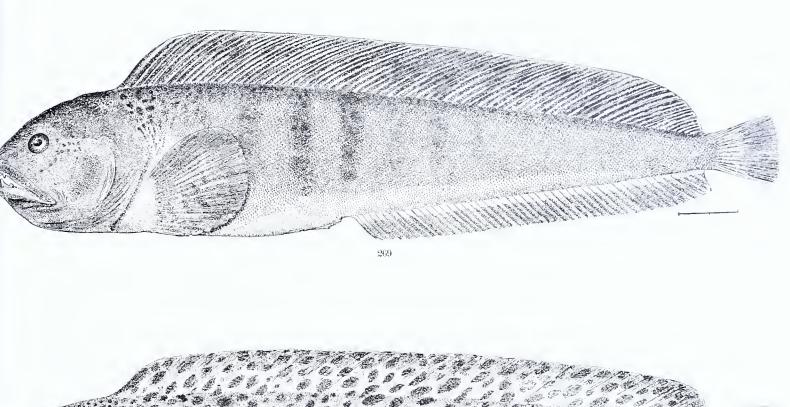
265. Lopholatilus chameleonticeps. (p. 284.)

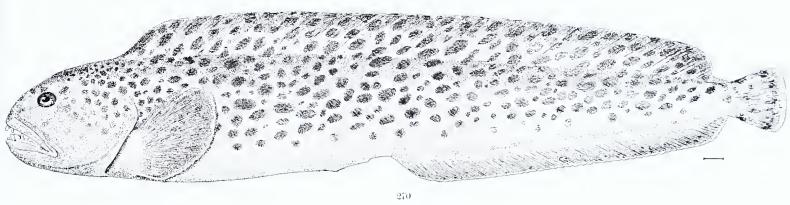


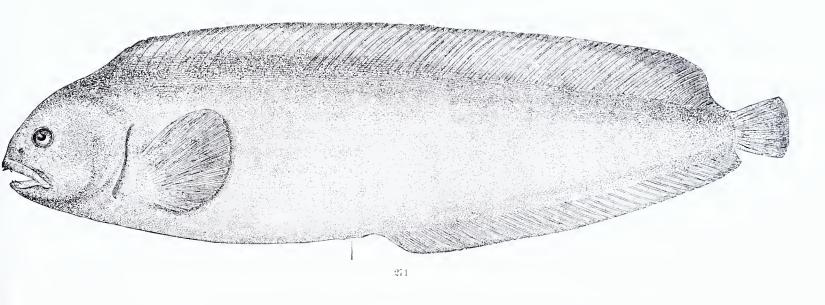


266. Pseudoscopelus scriptus. (p. 292.) 267. Porichthys porosissimus. (p. 294.) 268, 268a, b. Callionymus himantophorus. (p. 296.)



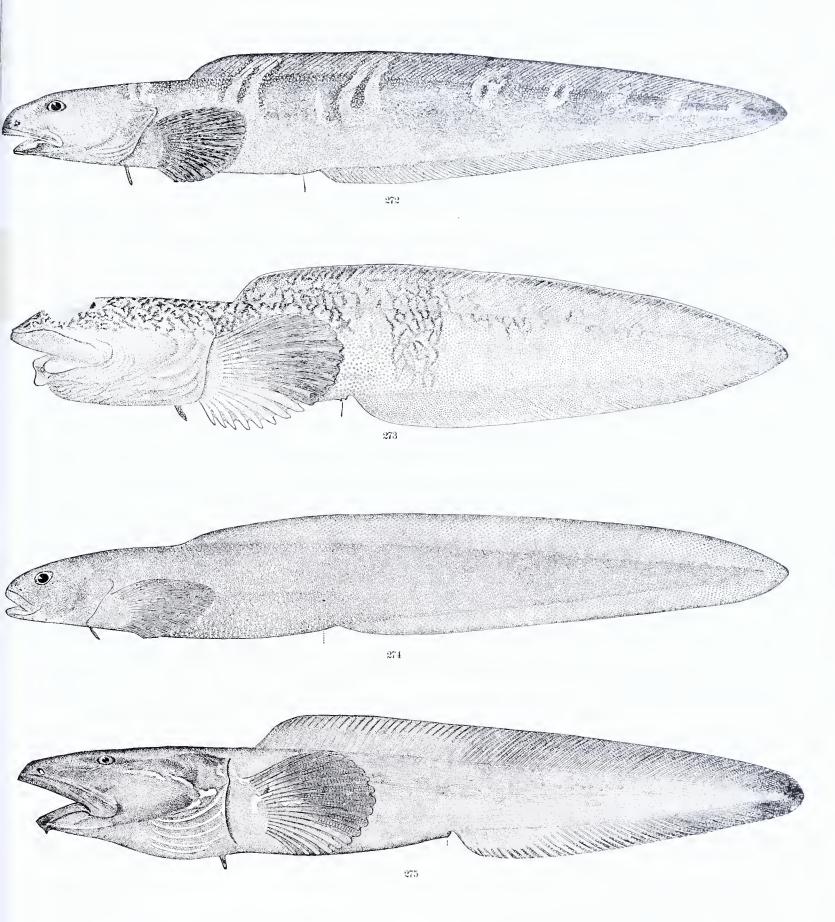






**269.** Anarrhichas Lupus. (p. 299.) 270. Anarrhichas Minor. (p. 301.) 271. Anarrhichas Latifrons. (p. 301.)

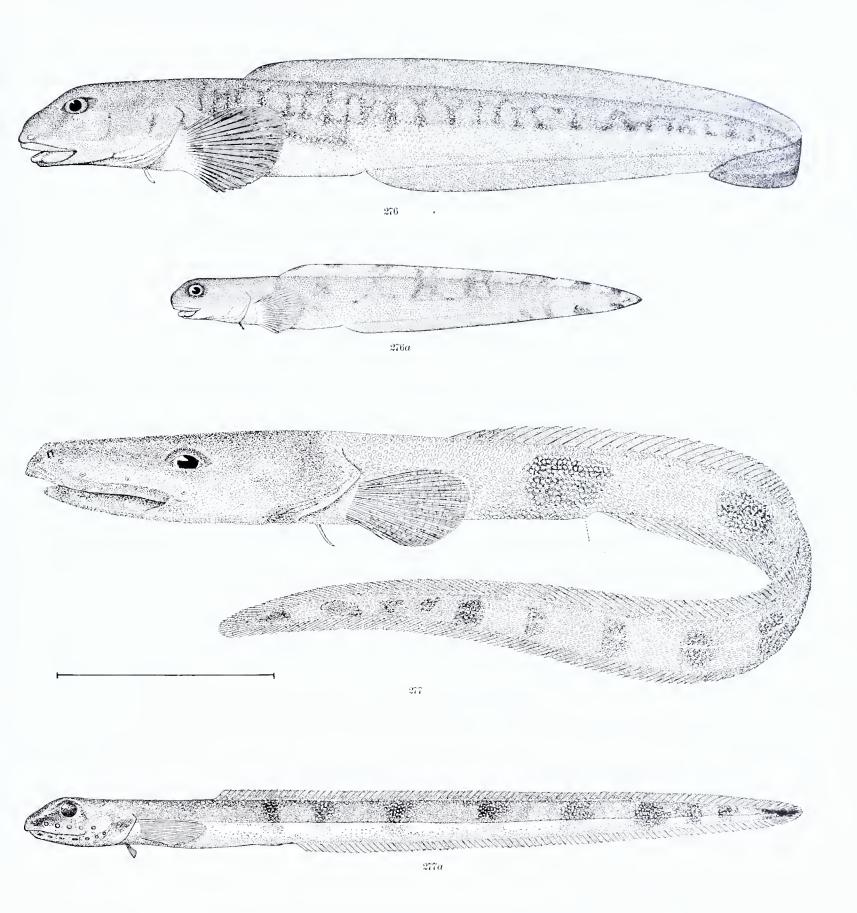




272. Lycodes Esmarkii. (p. 303.) 274. Lycodes frigidus. (p. 305.)

273. Lycodes reticulatus. (p. 305.) 275. Lycodes mucosus. (p. 306.)

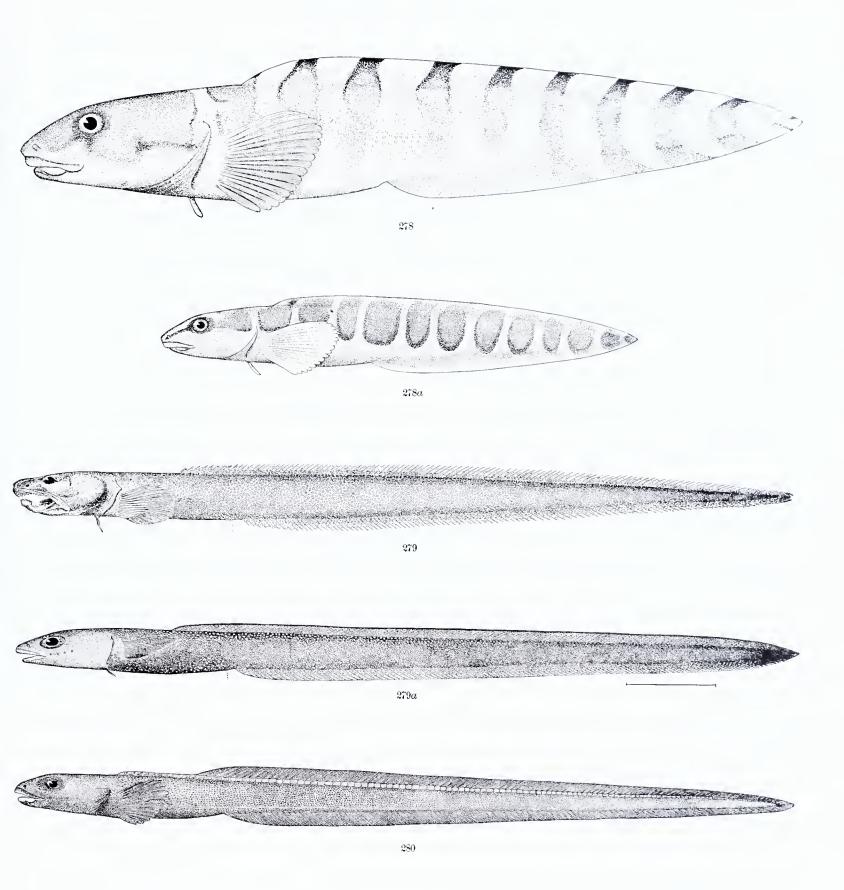




276, 276a. Lycodes zoarchus. (p. 308.)

277. 277a. Lycenchelys Verrillii. (p. 309.)





278, 278a. Lycodes perspicillum, (p. 307.) 279, 279a, Lycenchelys paxillus, (p. 311.) 280. Lycodonus mirabilis. (p. 312.)

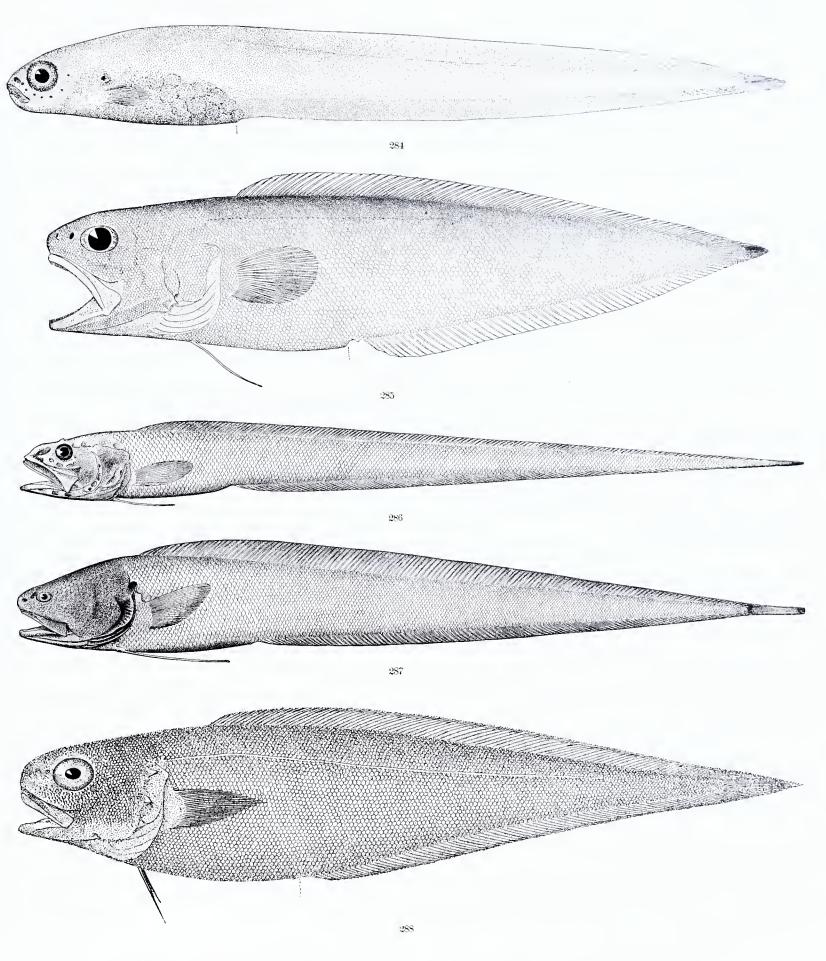




281 $a,\ b.$  Lycodes reficulatus. (p. 305.) 283 $a,\ b.$  Lycodes mucosus. (p. 306.)

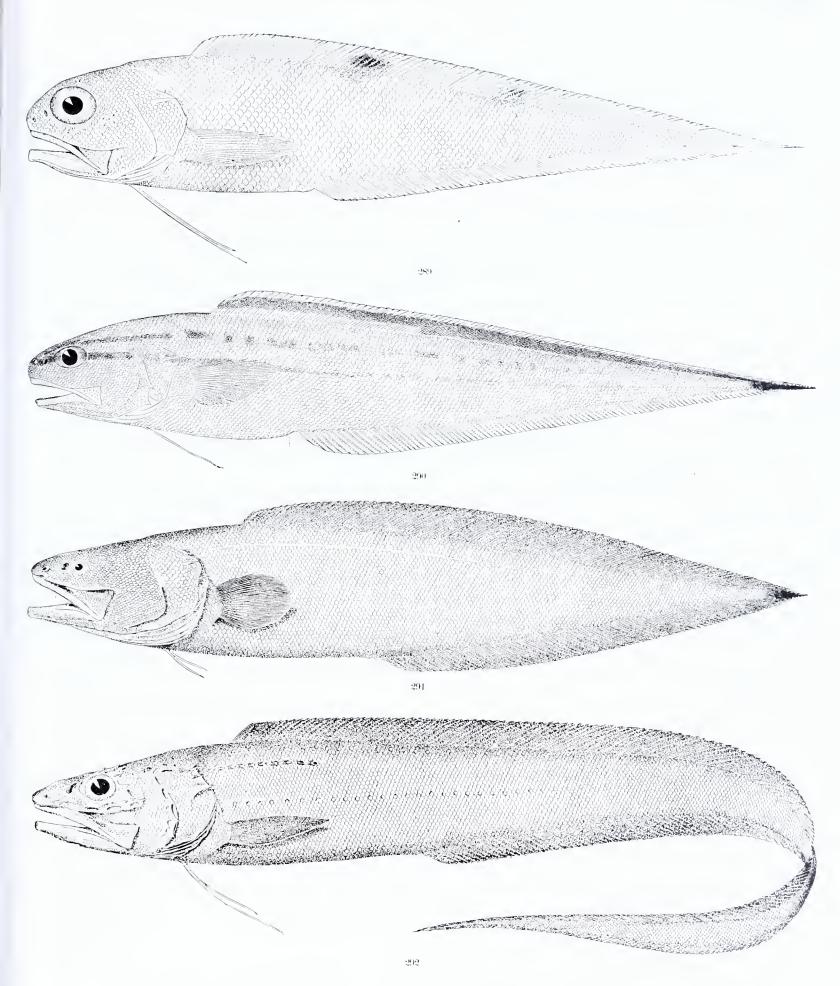
282. Lycenchelys paxillus. (p. 311.) 283c. Lycodes zoarchus. (p. 308.)





284. Melanostigma gelatinosum. (p. 314.) 286. Bassozetus catena. (p. 323.) 288. Benthocometes robustus. (p. 327.) (p. 322.)

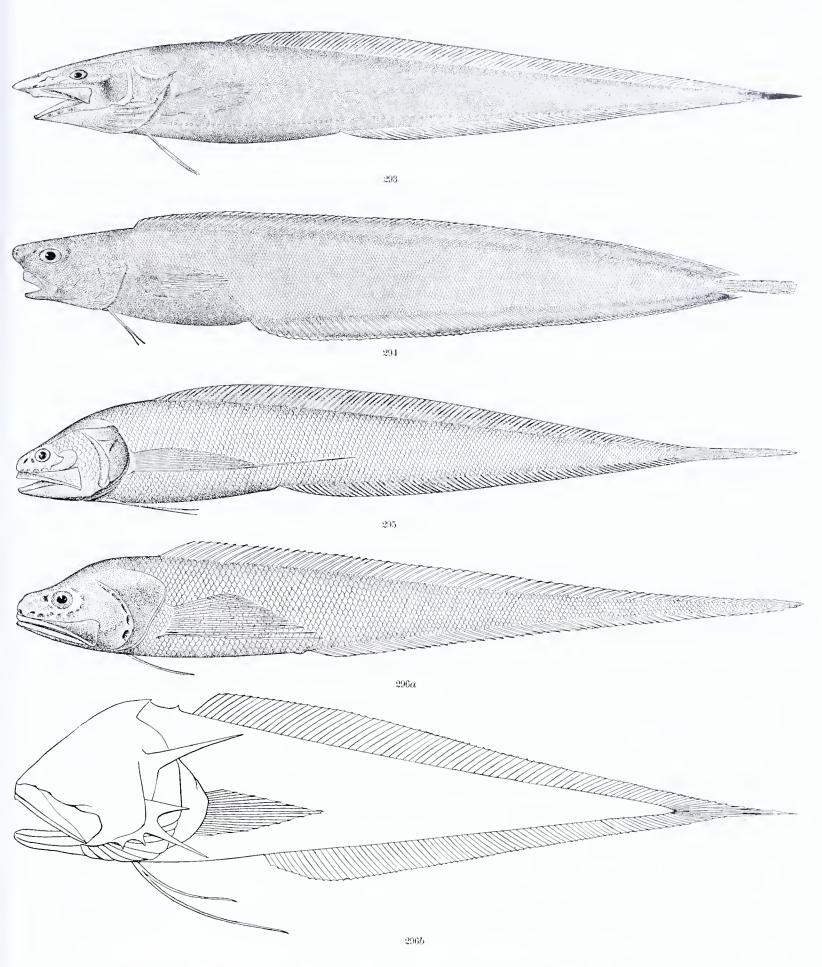




289. Neobythites Gillii. (p. 325.) 291. Bassogigas Gillii. (p. 328.)

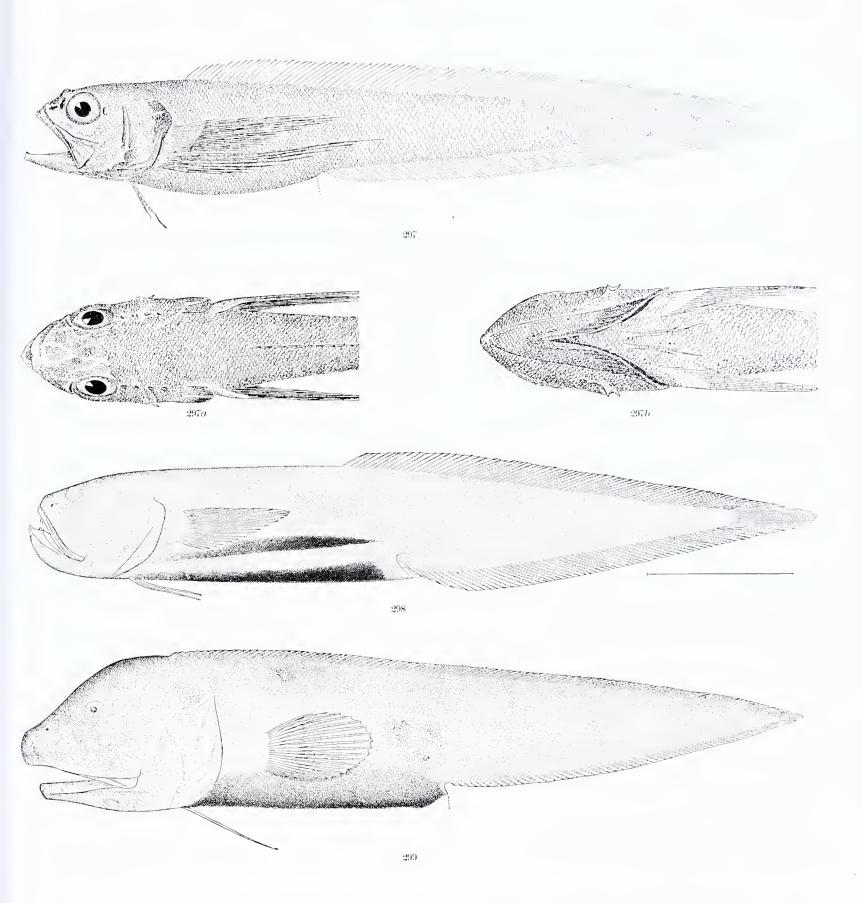
290. Neobythites marginatus. (p. 326.) 292. Porogadus miles. (p. 334.)





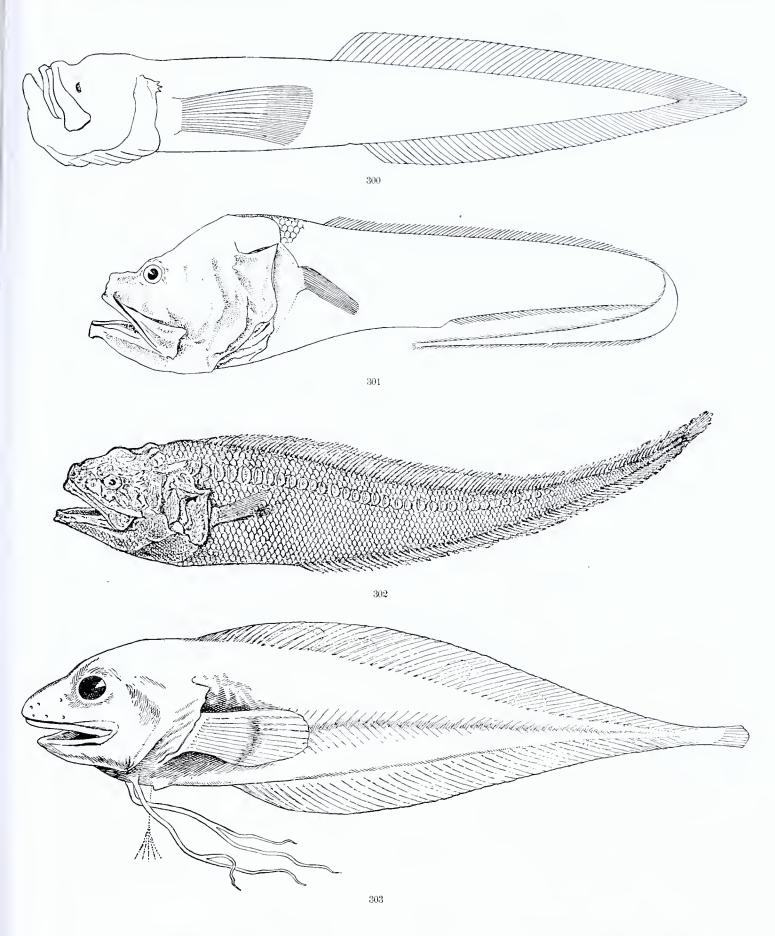
293. Penopus Macdonaldi. (p. 336.) 294. Barathrodemus manatinus. (p. 332.) 295. Nematonus pectoralis. (p. 333.) 296a. Mixonus laticeps. (p. 339.) 296b. Tauredophidium Hextii. (p. 336.)





297, 297a, b. Dicrolene intronigra. (p. 338.) 298. Barathronus bicolor. (p. 341.) 299. Aphyonus mollis. (p. 342.)

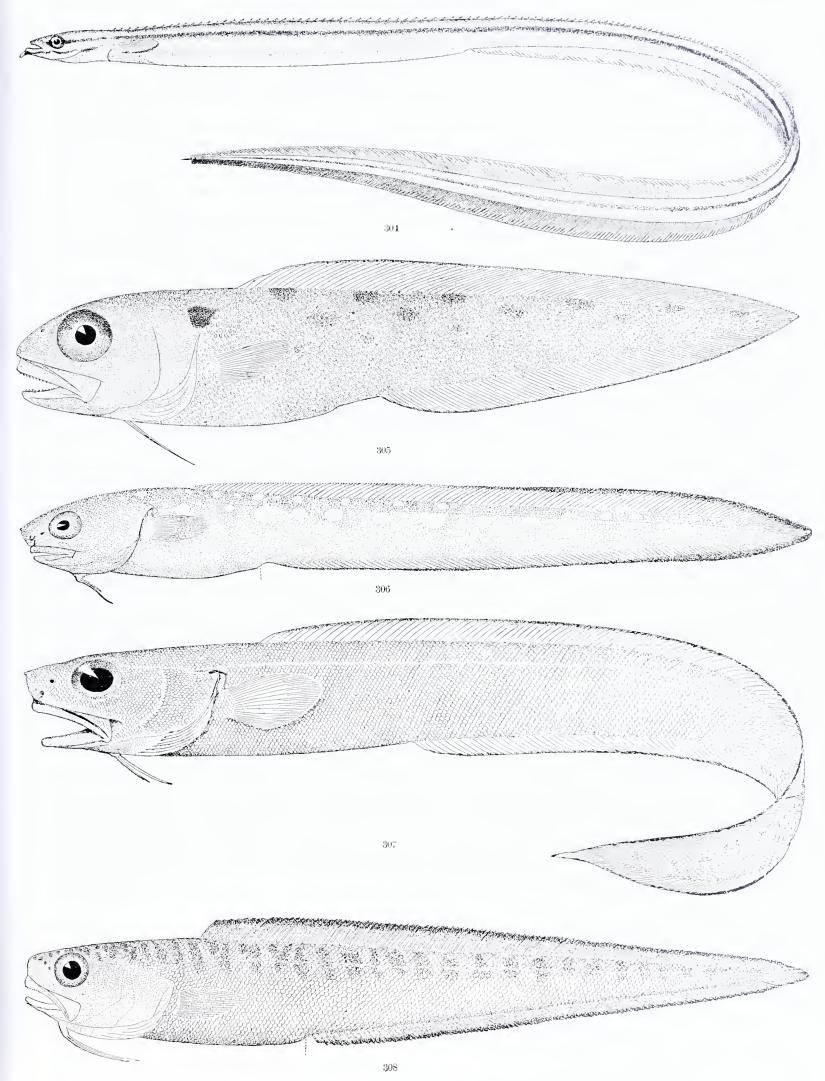




300. Alexeterion parfaiti. (p. 343.) 302. Lamprogrammus niger. (p. 344.)

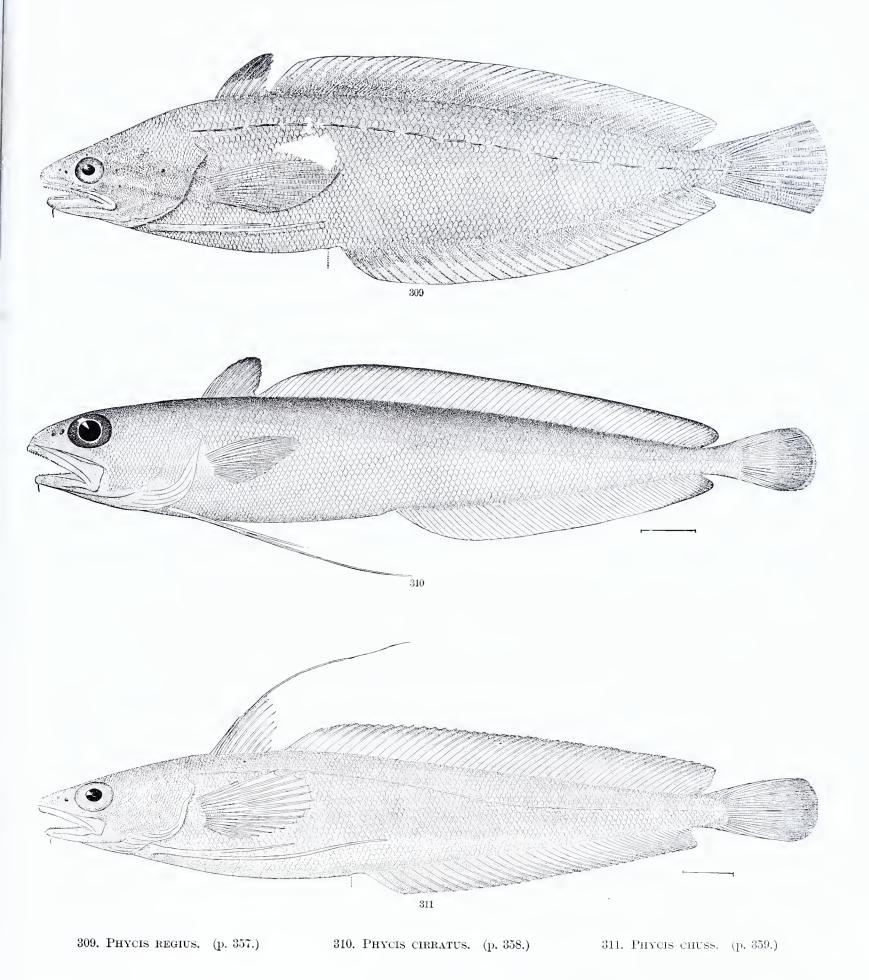
301. Hephthocara simum. (p. 344.) 303. Rhodichthys regina. (p. 342.)



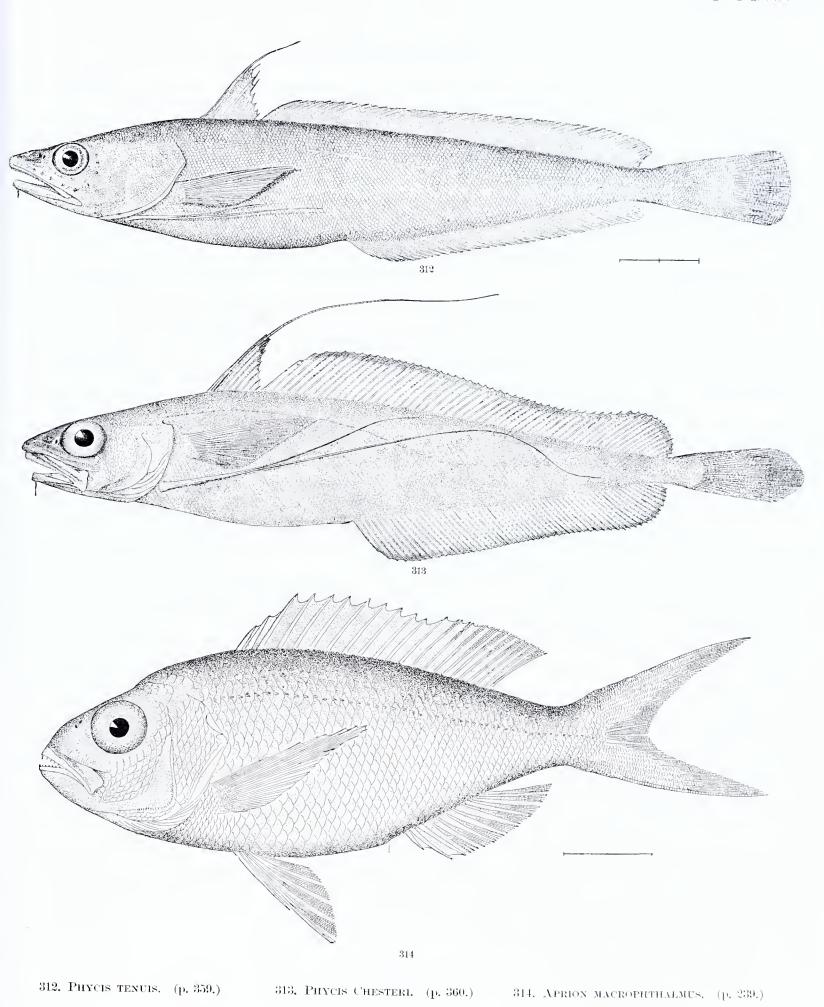


304. Ptilichthys Goodel. (р. 302.)
305. Оторной и омоятіяма (р. 315.)
306. Leptophidium cervinum. (р. 346.)
307. Leptophidium profundorum. (р. 317.)
308. Leptophidium макмокатим. (р. 348.)

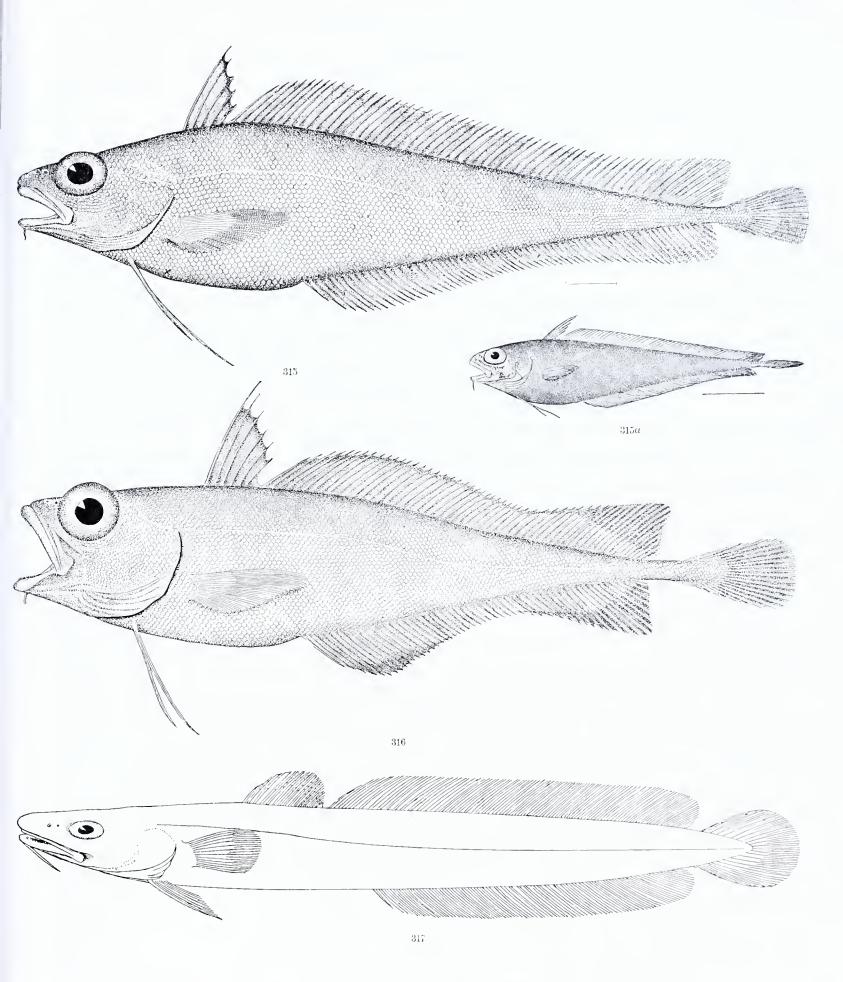






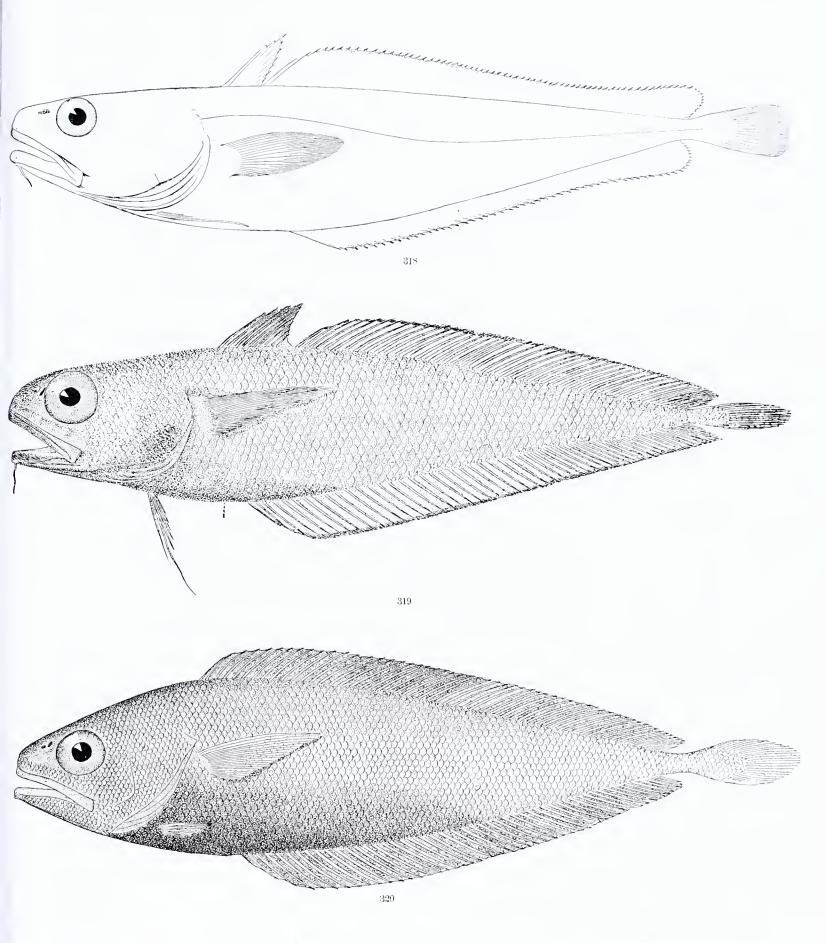






315. 315a. Læmonema barbatula. (p. 362.) 316. Læmonema melanurum. (p. 363.) 317. Molva vulgaris. (p. 364.)



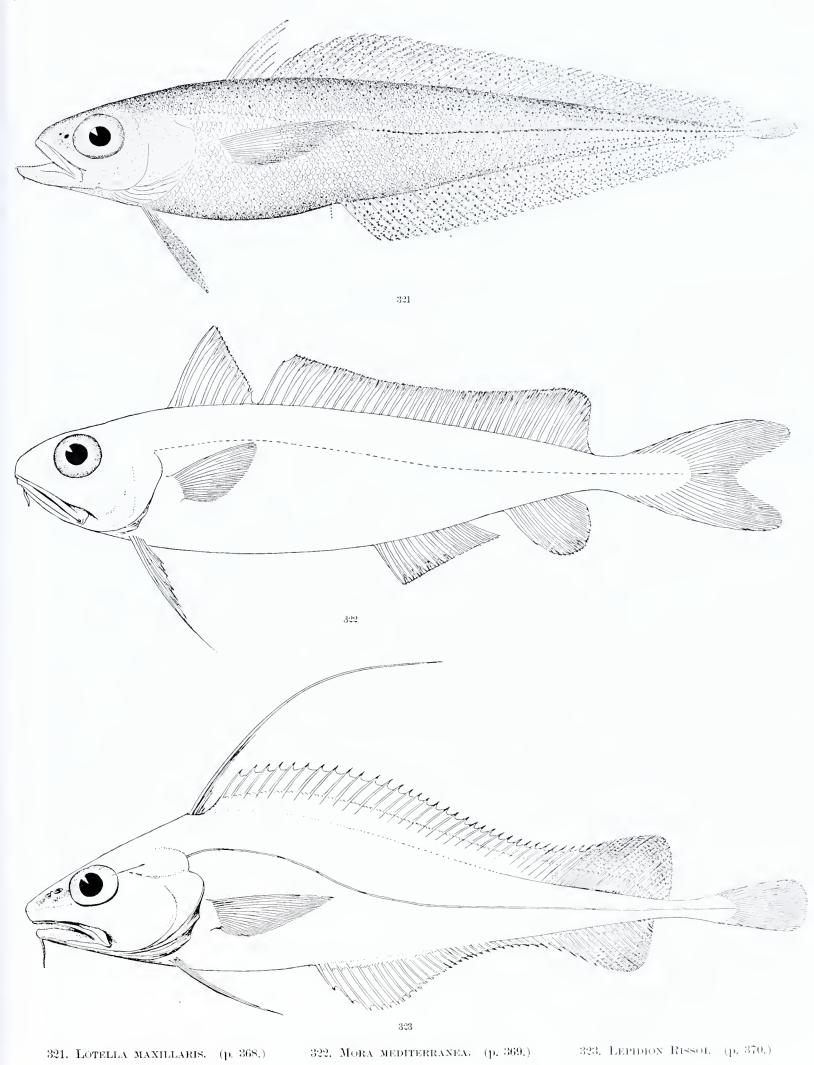


318. Physiculus Kaupi. (p. 366.)

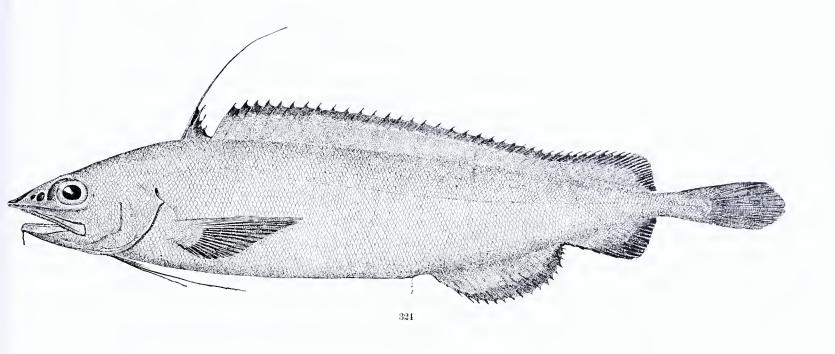
319. Physiculus fulvus. (p. 366.)

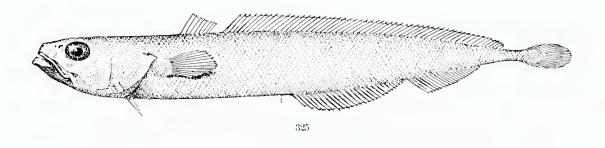
320. Uraleptus Maraldi. (p. 367.)

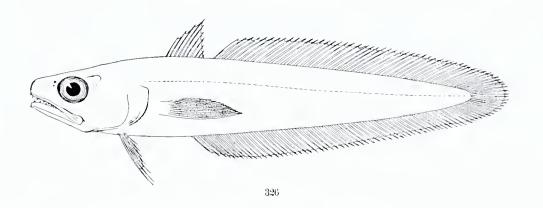




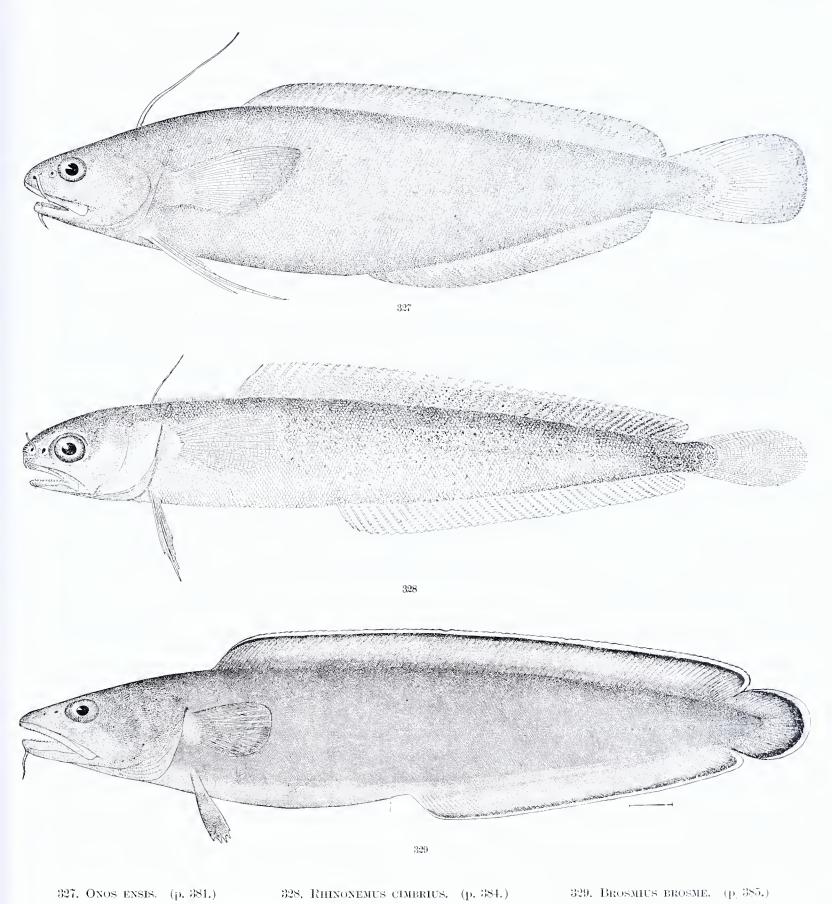




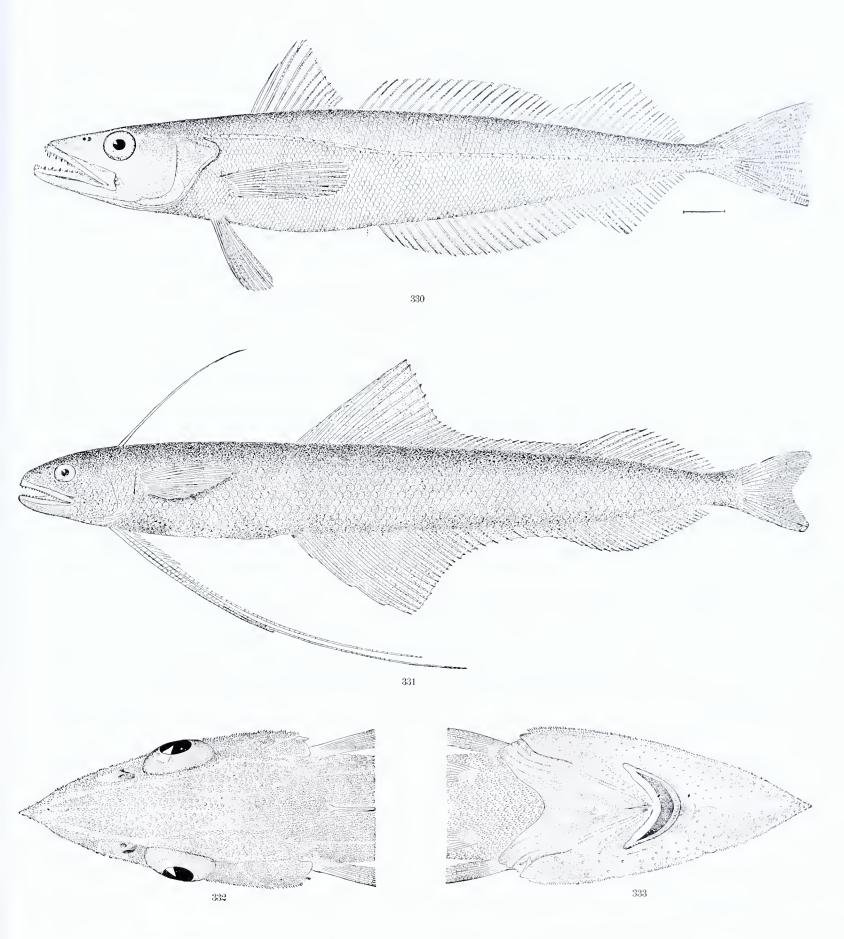




324. Antimora viola. (p. 372.) 325. Halargyreus brevipes. (p. 375.) 326. Strinsla tinca. (p. 380.)

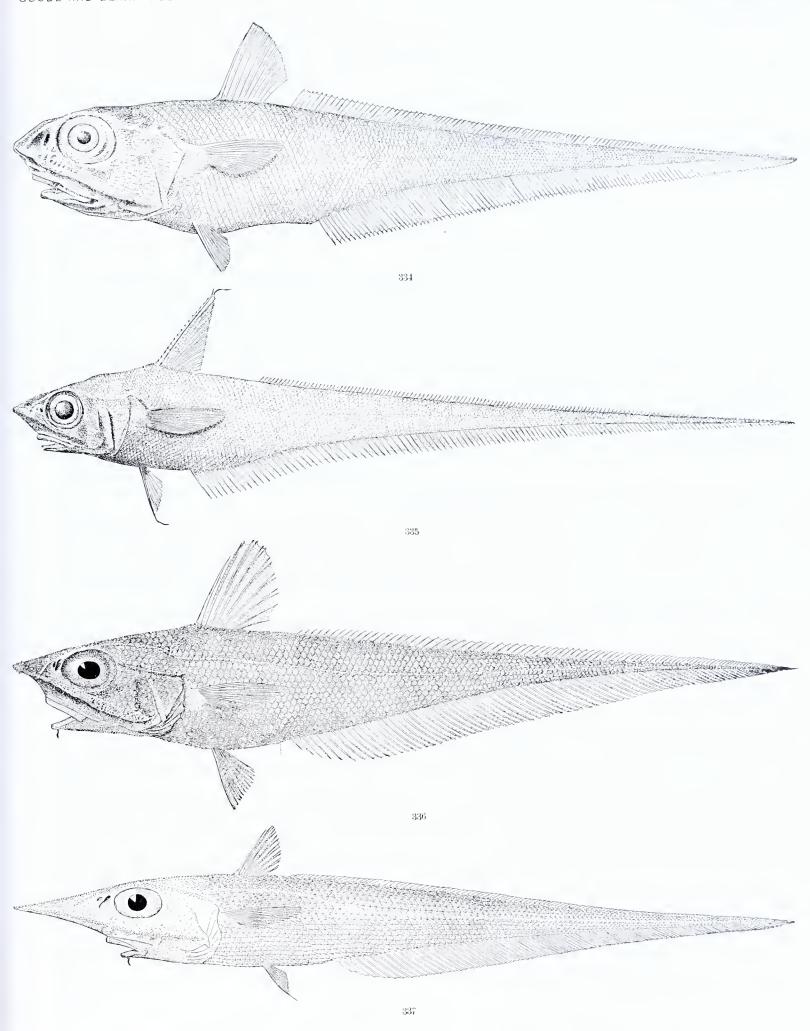






330. Merlucius bilinearis. (p. 386.) 331. Bregmaceros atlanticus. (p. 388.) 332, 333. Cælorhynchus occa. (p. 400.)

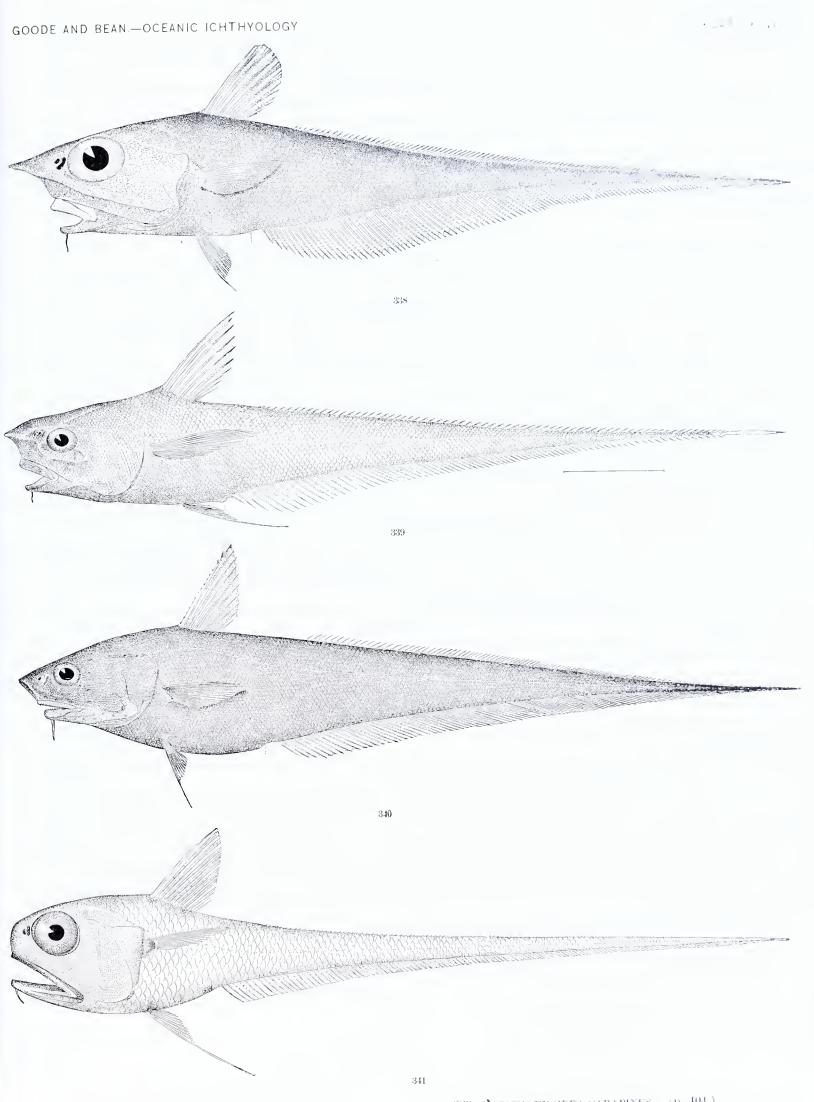




334. Macrurus Berglax. (p. 391.) 336. Cœlorhynchus carminatus. (p. 398.)

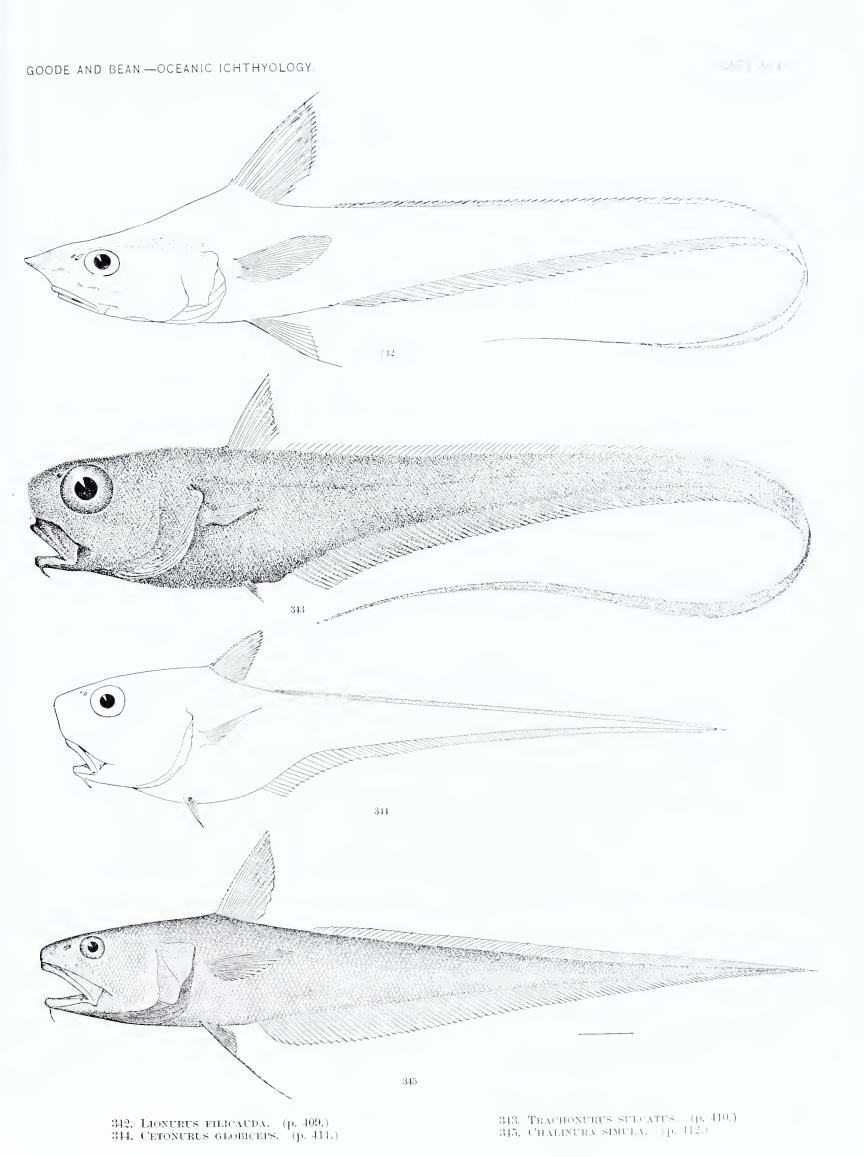
335. Macrurus Bairdh. (p. 393.) 337. Celorhynchus occa. (p. 400.)



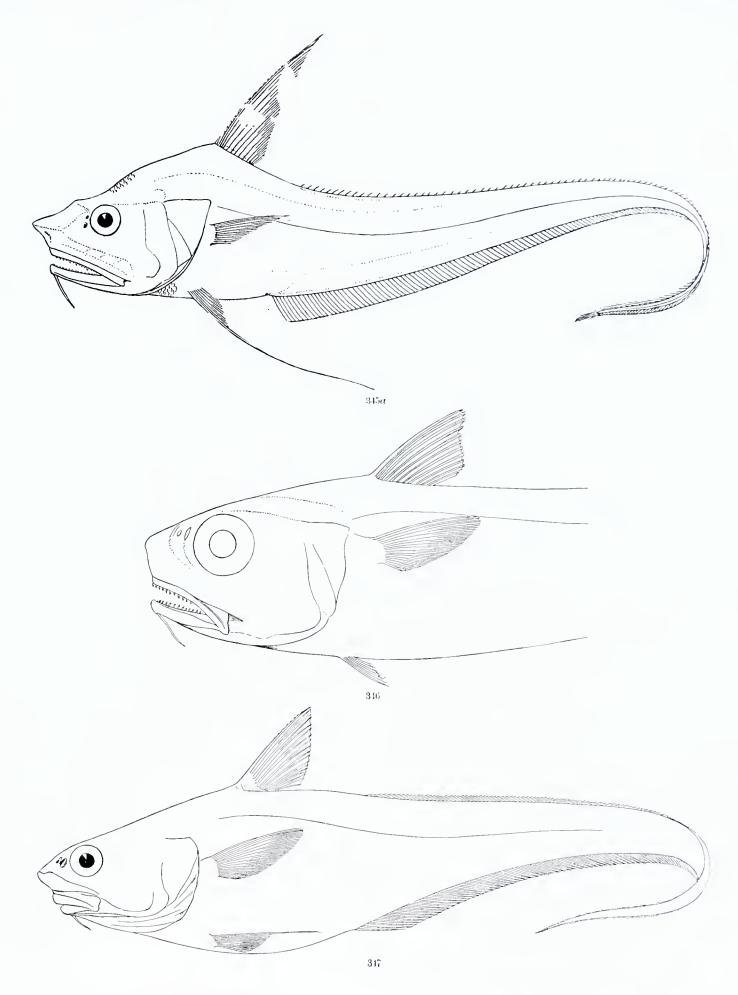


338. Cœlorhynchus caribbæus. (p. 401.) 340. Hymenocephalus Goodel. (p. 407.) 339. Coryphænoides carapinus. (p. 404.) 341. Hymenocephalus cavernosus. (p. 408.)



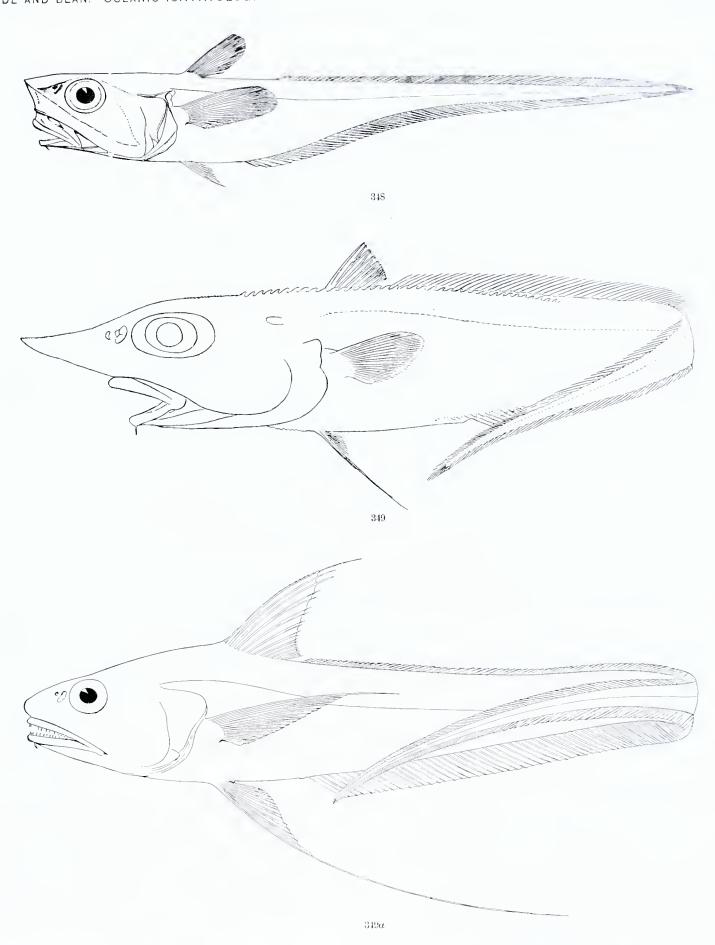






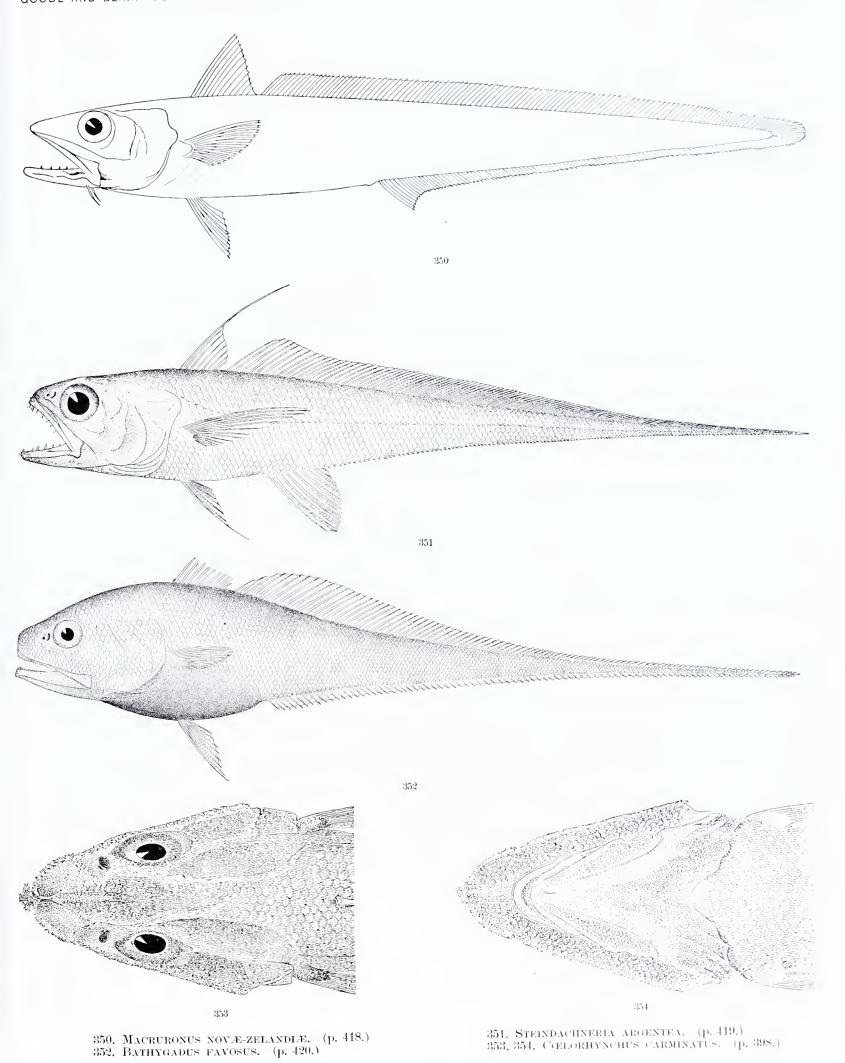
345a. Chalinura mediterranea. (p. 525.) 346. Nematonurus gigas. (p. 416.) 347. Moseleya longifilis. (p. 417.)





348. Abyssicola macrochira. (p. 417.) 349. Trachyrhynchus scabrus. (p. 417.) 349a. Macrurus longifilis. (p. 417.)





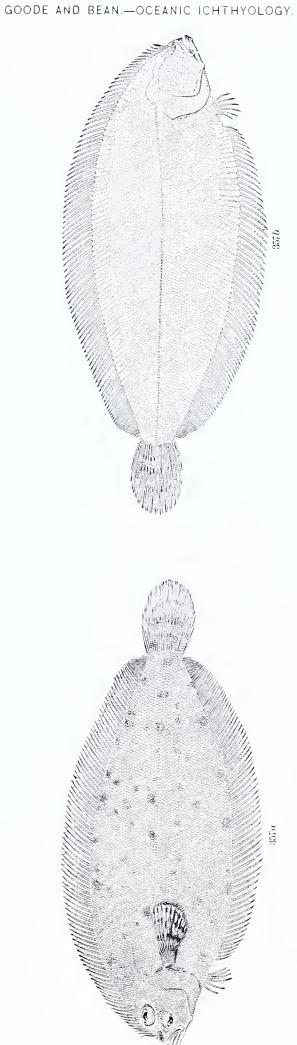




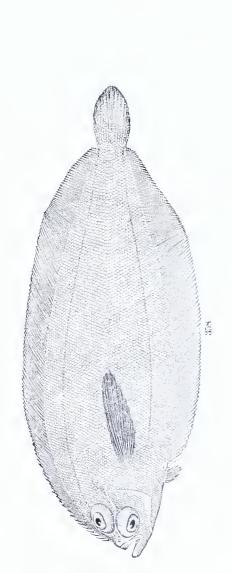
355 $\alpha$ -d. Limanda Beanh. (р. 428.)

356a, b, Glyptocephalus cynoglossus, (p. 430.)

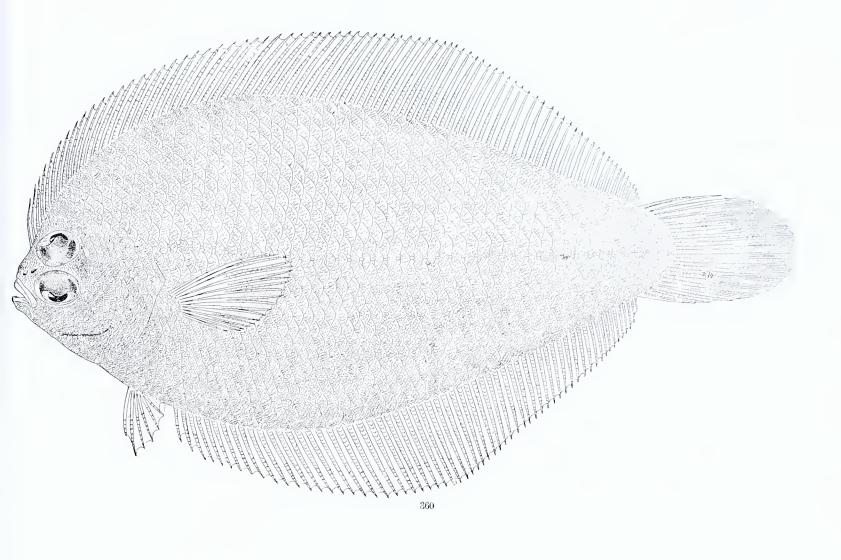
		Ą
		•

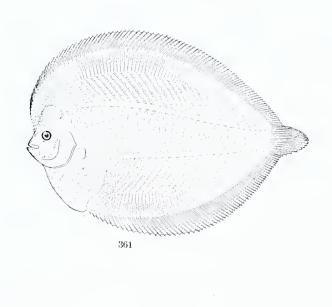


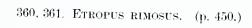
357a, b. Monolene sessilicauda. (p. 452.)

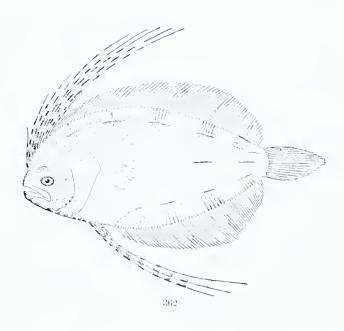


358, 359, MONOLENE ATRIMANA. (p. 455.)

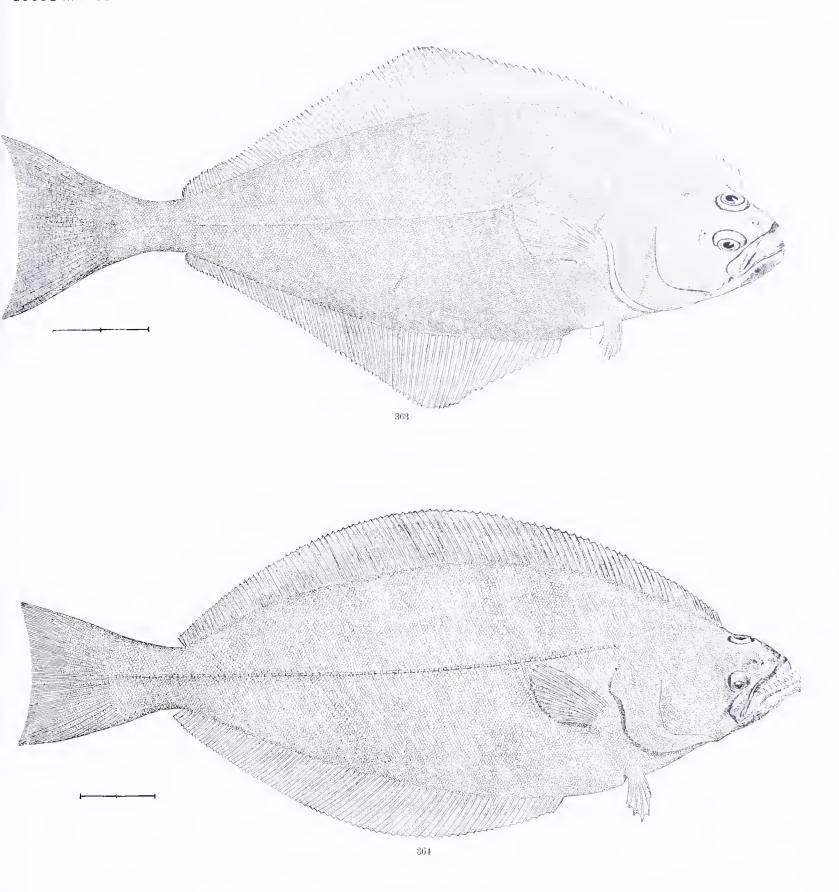








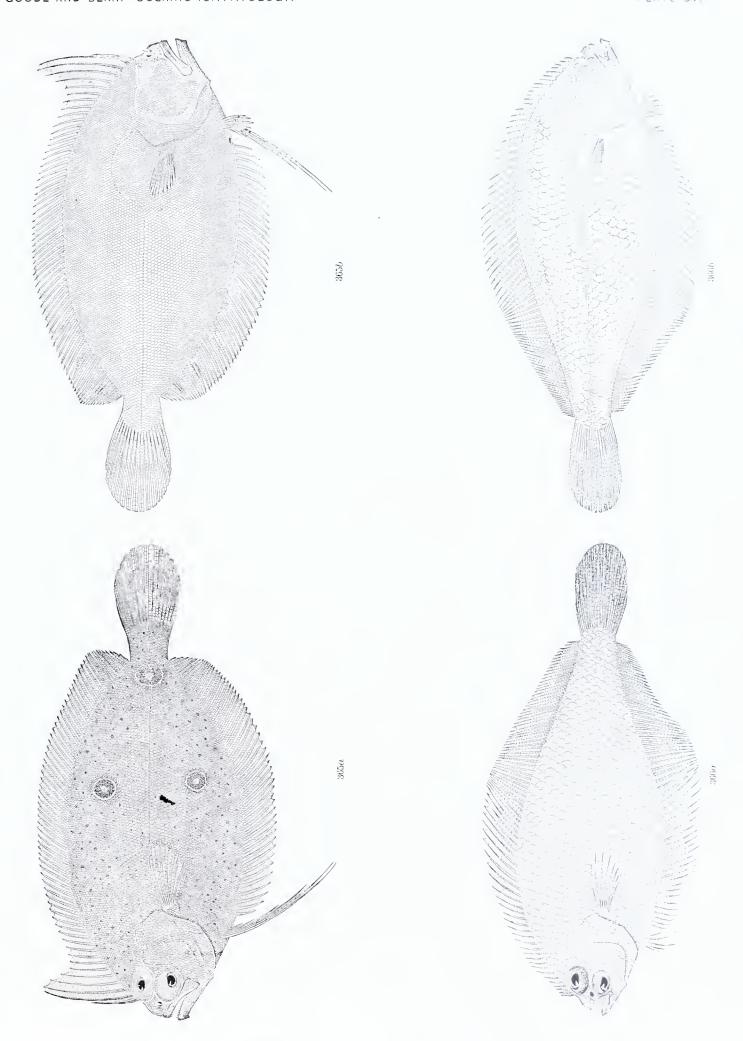
362. Хотоѕема видеста. (р. 437.)



363. Hippoglossus vulgaris. (p. 434.)

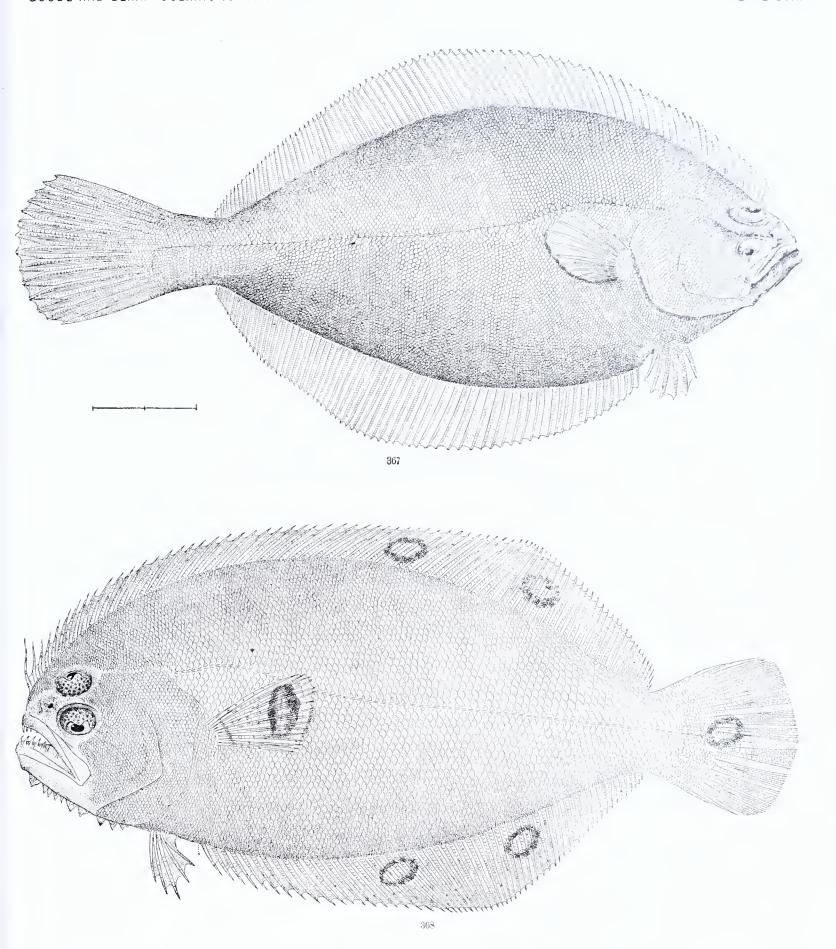
364. Platysomatichthys hippoglossoides. (p. 435.)

	٠			



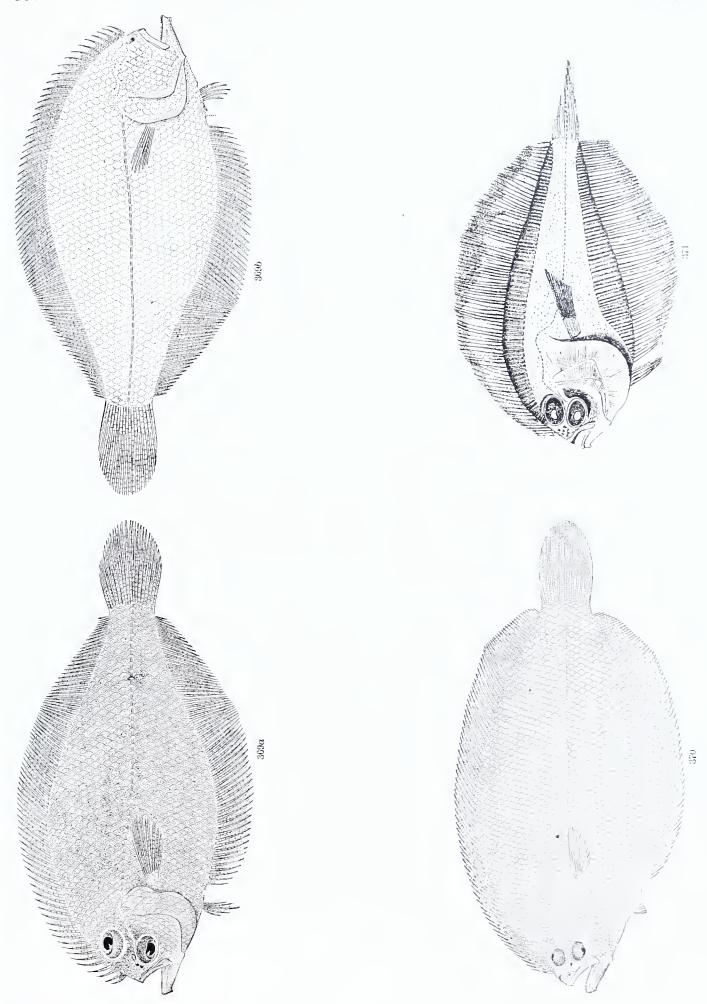
365*a*, *b*. Notosema dilecta. (р. 437.)

366a, b. Citharichthys arctifrons. qp. 112.)



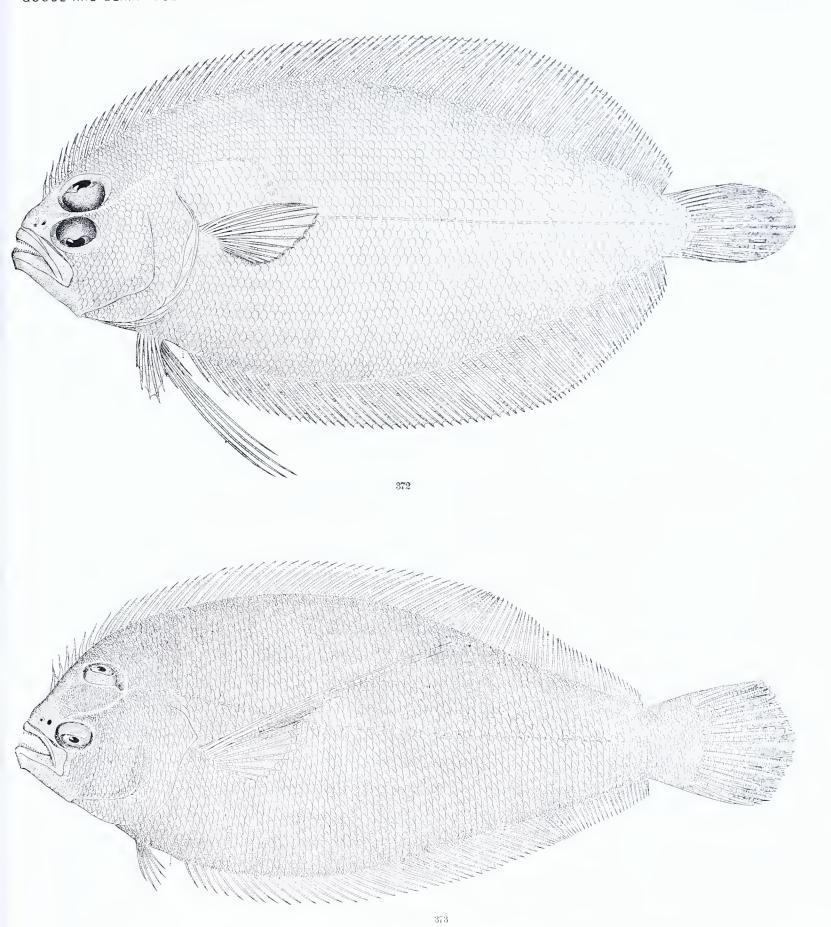
367. Hippoglossoides platessoides. (p. 438.) 368. Cyclopsetta fimbriata. (p. 451.)





369a, b. Citharichthys unicornus. (p. 444.) 370. Citharichthys spilopterus. (p. 4!7.) 371. Scianectes macrophthalmus. (p. 4!0.)





372. TRICHOPSETTA VENTRALIS. (p. 440.)

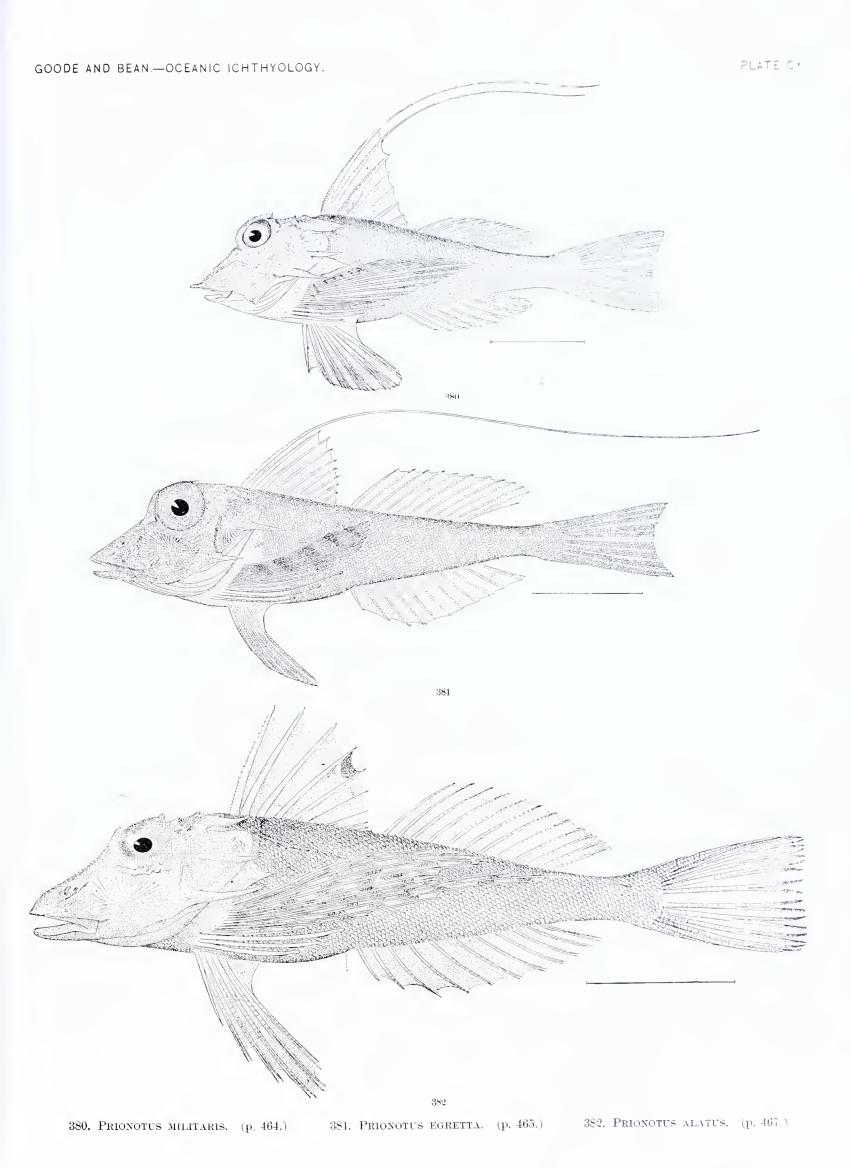
373. CITHARICHTHYS PÆTULUS. (p. 448.)

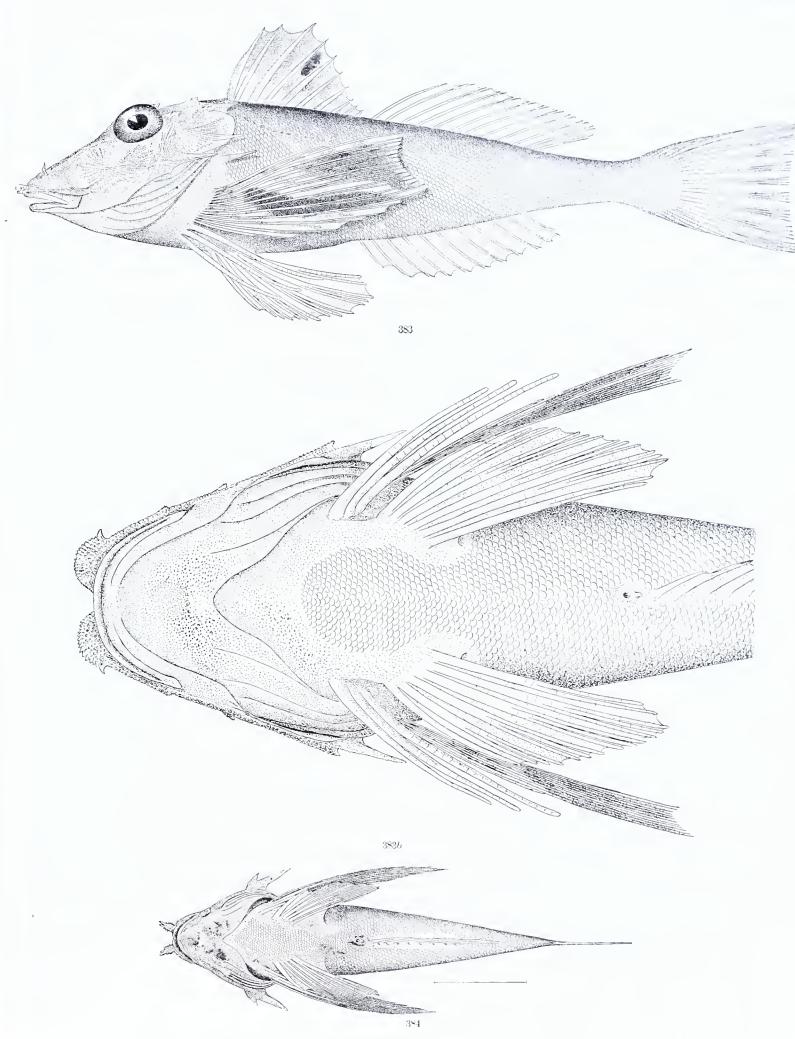




374. Aphoristia fasciata. (p. 458.) 377. Aphoristia pigra. (p. 460.)

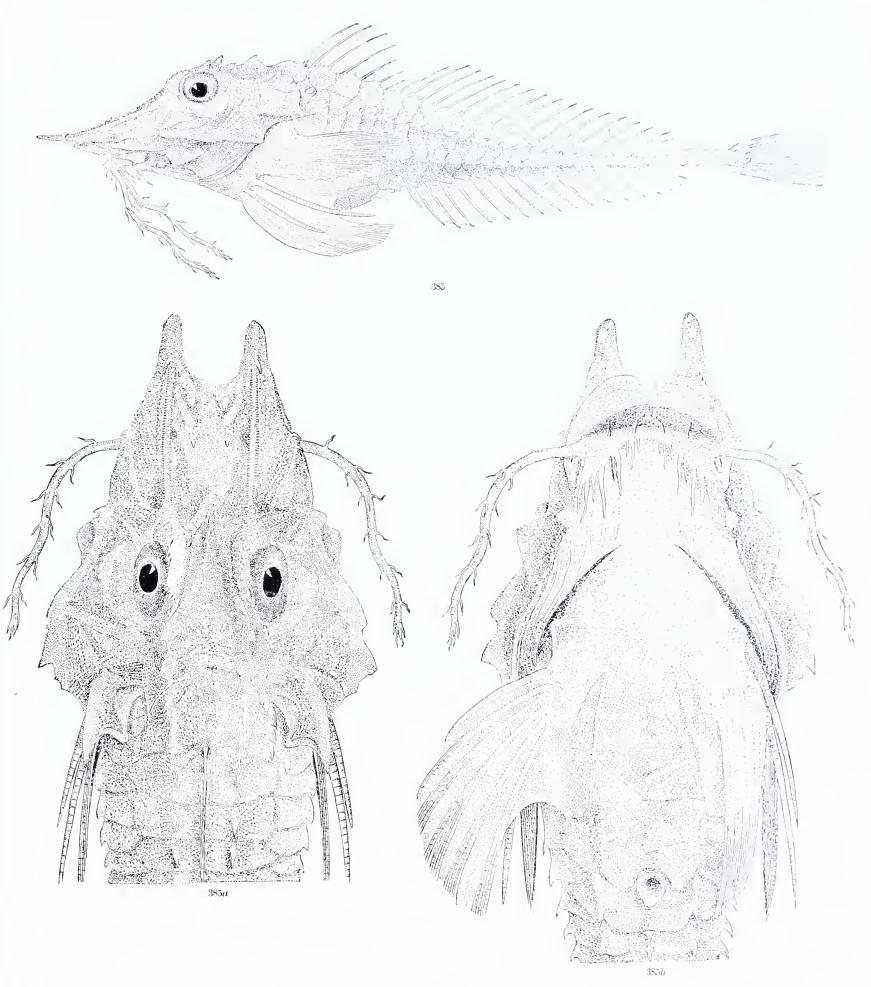
375. Aphoristia nebulosa. (p. 458.) 376. Aphoristia marginata. (p. 459.) 378. Aphoristia diomediana. (p. 460.) 379. Aphoristia pusilla. (p. 461.)



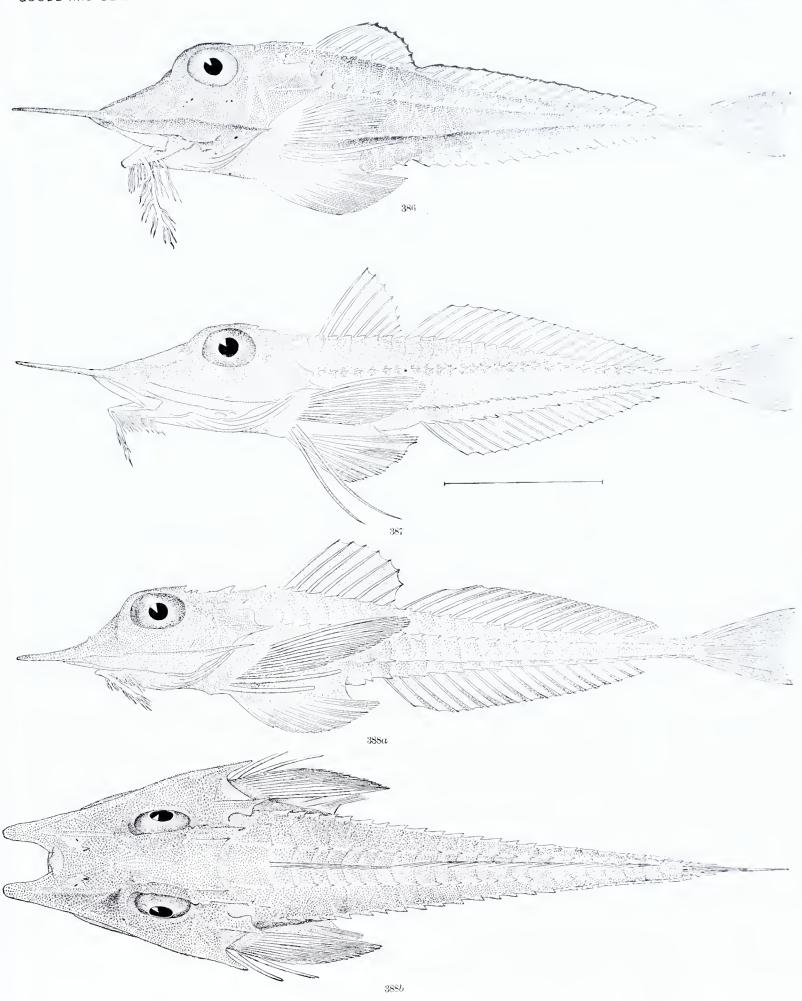


**383**, **383***b*. Prionotus trinitatis. (р. 468.)

384. Prionotus militaris. (p. 464.)

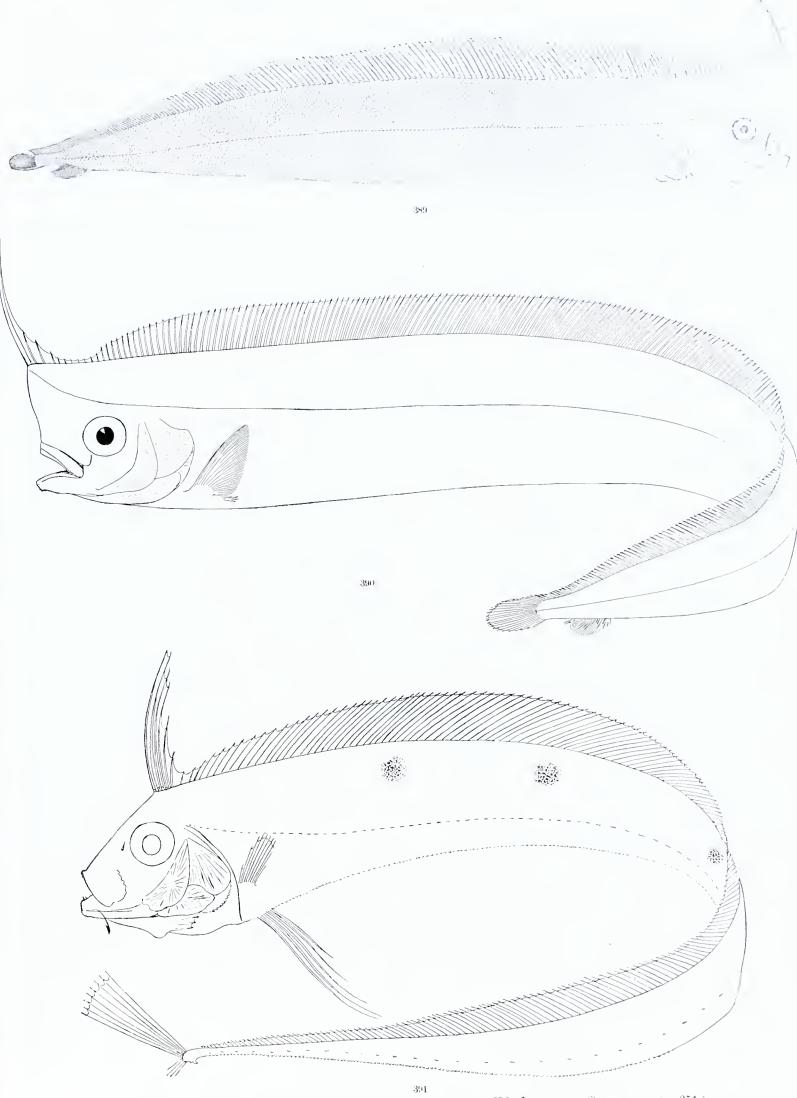


385, 385a, b. Peristedion miniatum. (p. 470.)



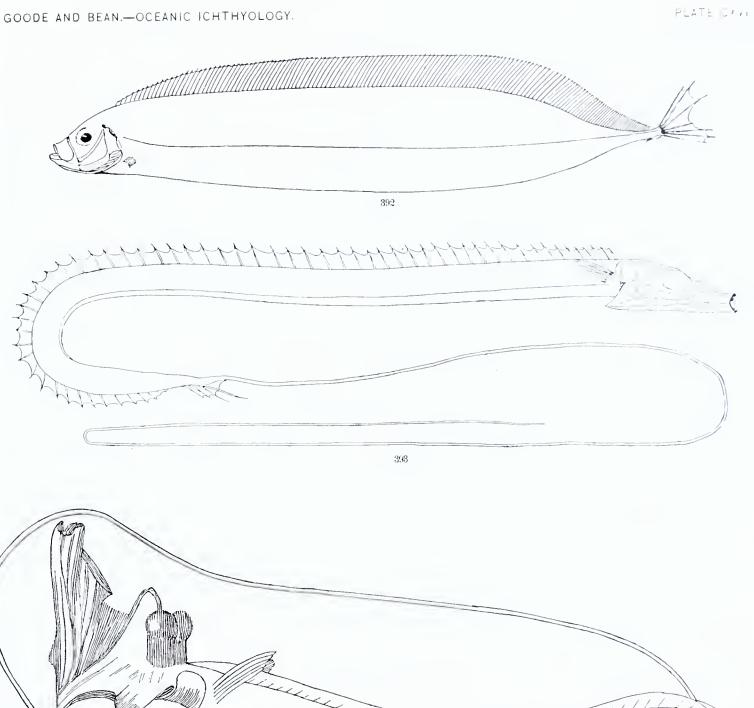
386. Peristedion longispatha. (p. 472.) 387. Peristedion gracile. (p. 473.) 388a,b. Peristedion platycephalum. (p. 474.)

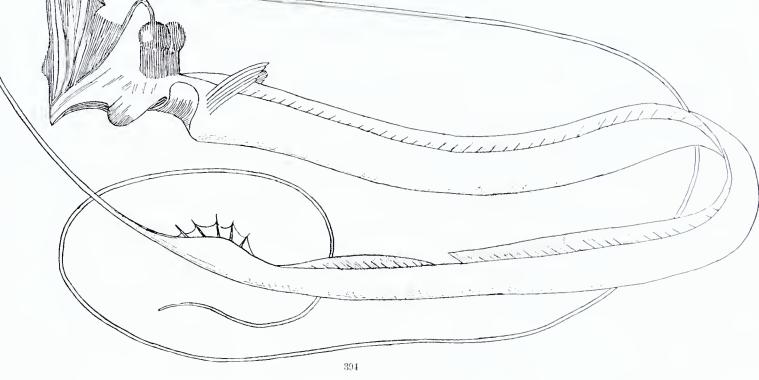
·



391 389. Lophotes Cepedianus. (p. 349.) 391. Trachypterus iris. (p. 477.)

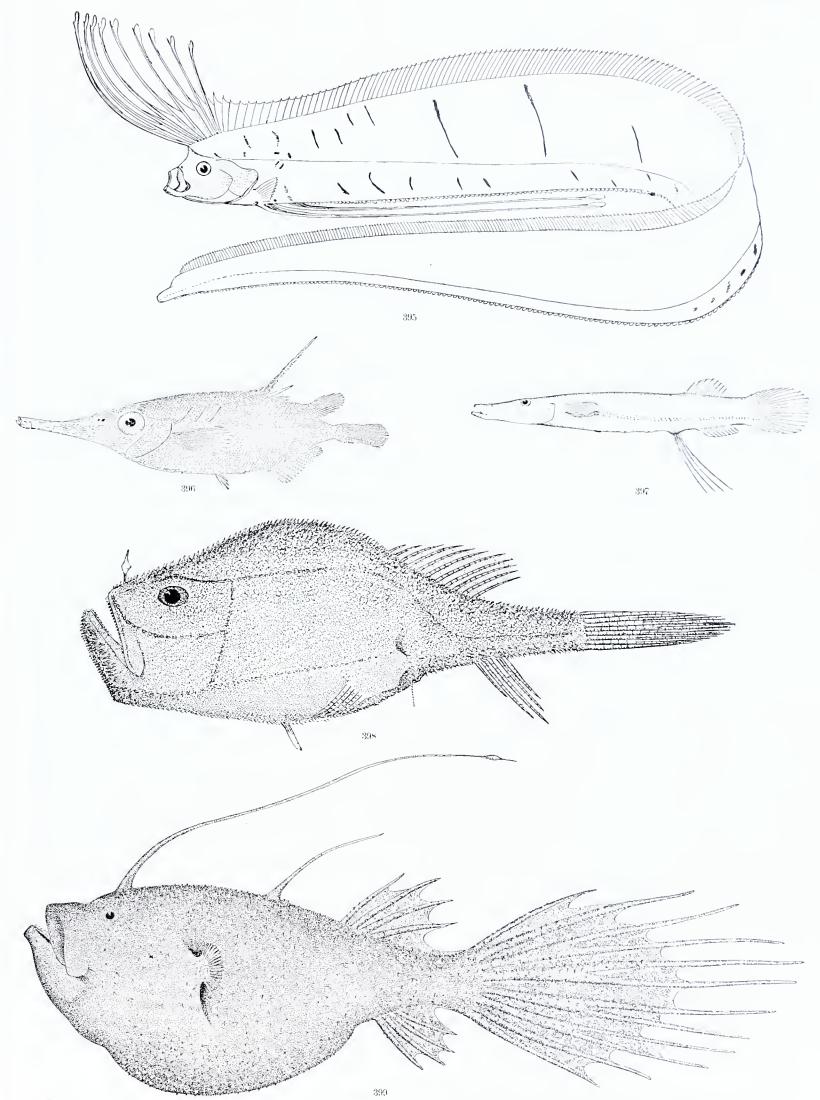
		,





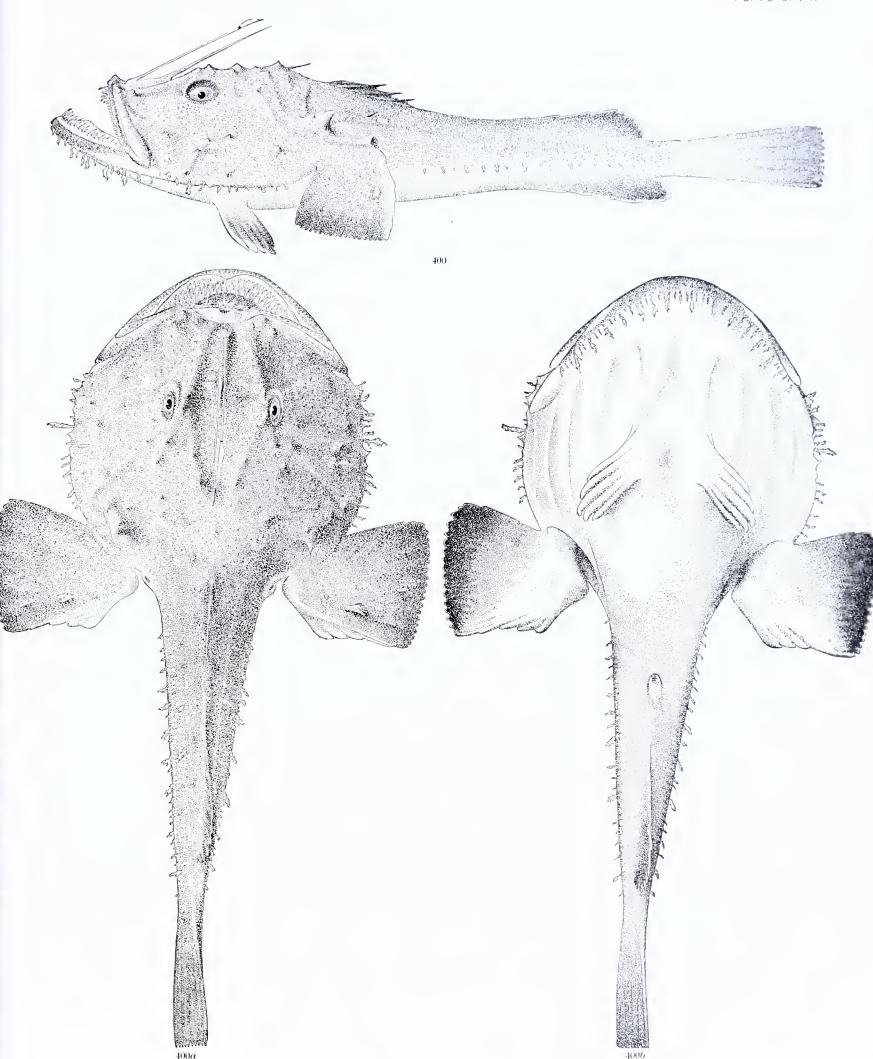
**392.** Trachypterus arcticus. (p. 479.) 393, 394. Stylephorus chordatus. (p. 482.)

		•



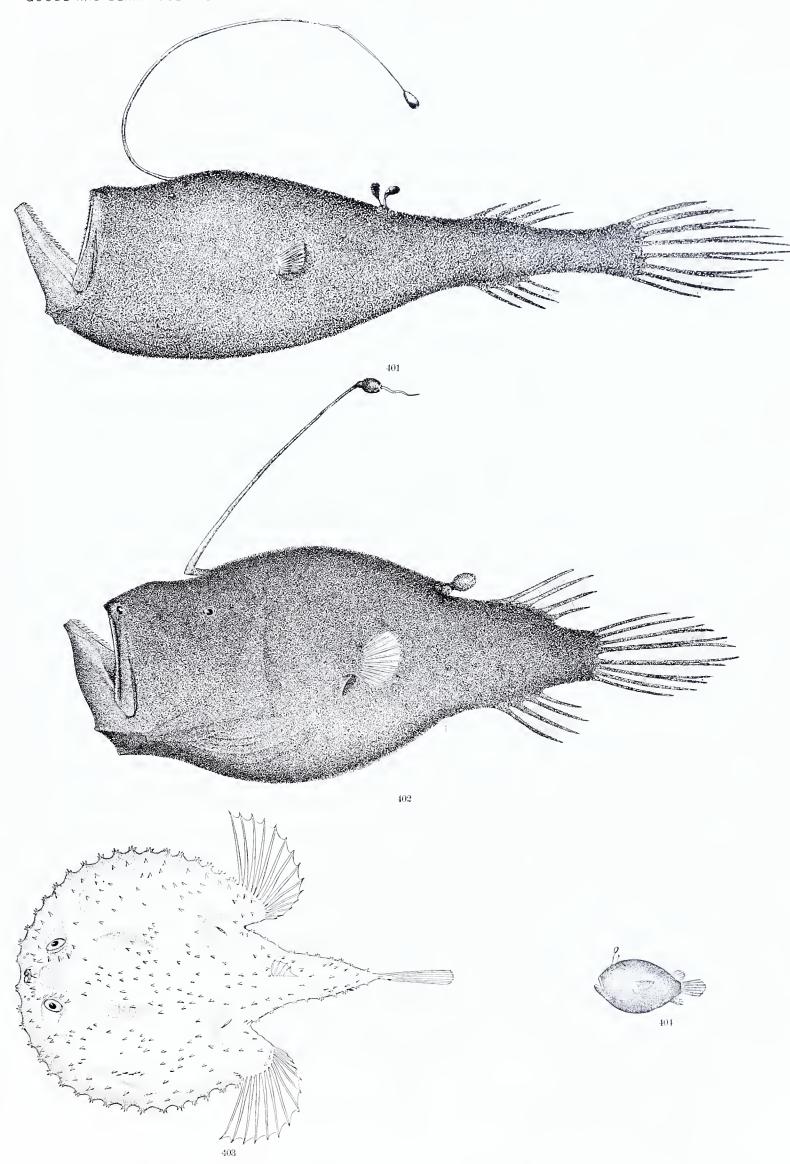
395. REGALECUS GLESNE. (p. 480.) 396. MACRORHAMPHOSUS SCOLOPAX. (p. 483.) 397. AULOSTOMA LONGIPES. (p. 484.) 398. CHAUNAX PICTUS. (p. 487.) 399. CERATIAS HOLBÖLLI. (p. 489.)

- Ta	~
· ·	



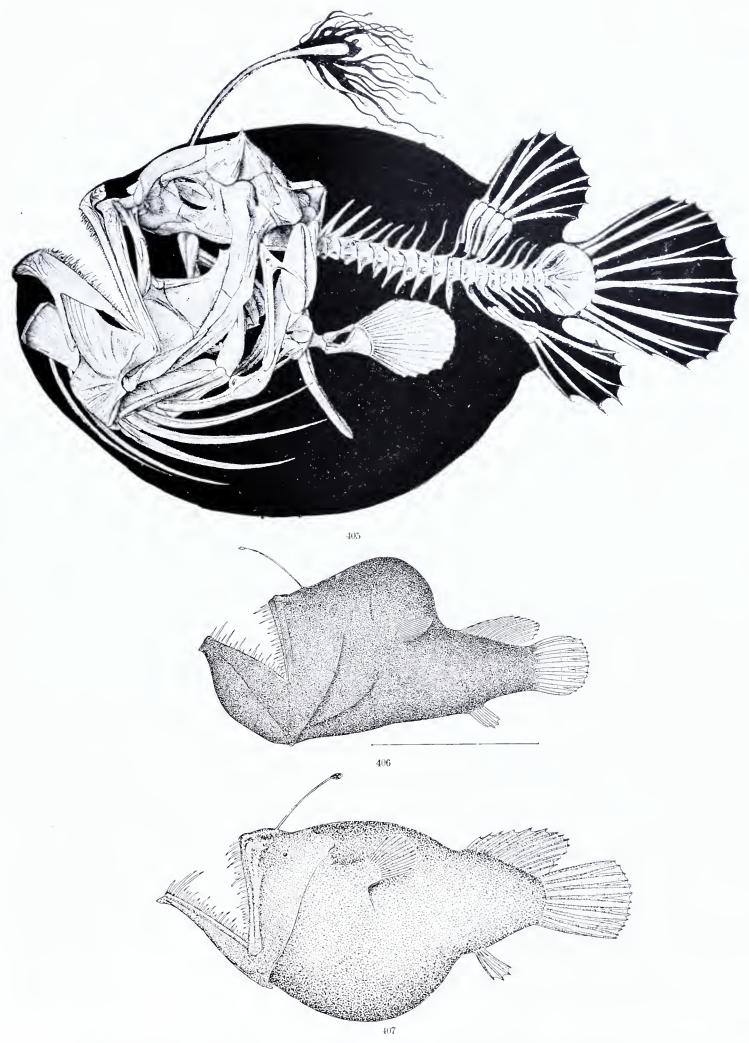
400, 400*a*, *b*. Löphius piscatorius. (p. 485.)





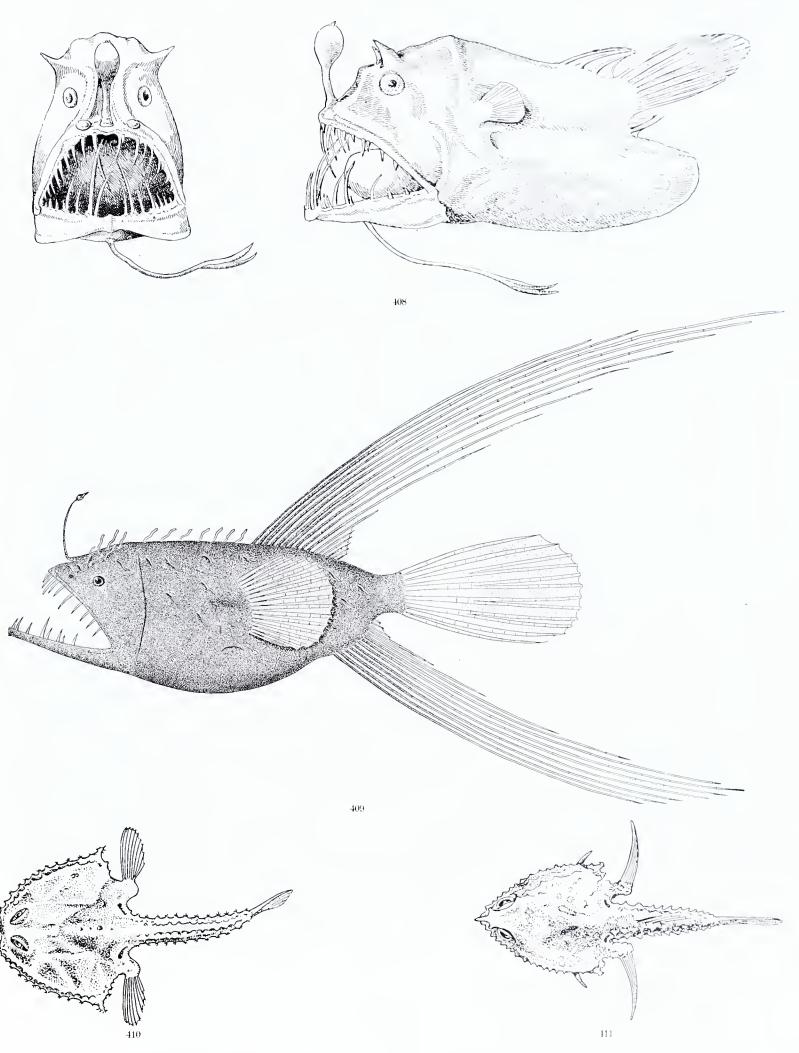
401. Mancalias Shufeldtii. (p. 490.) 403. Halieutæa stellata. (p. 499.) 402. Cryptopsaras Couesii, (p. 491.) 404. Parôneirodes glomerosus. (p. 493.)





405. Corynolophus Reinhardtii. (р. 494.) 406. Melanocetus Johnsonii. (р. 494.) 407. Liocetus Murrayi. (р. 495.)

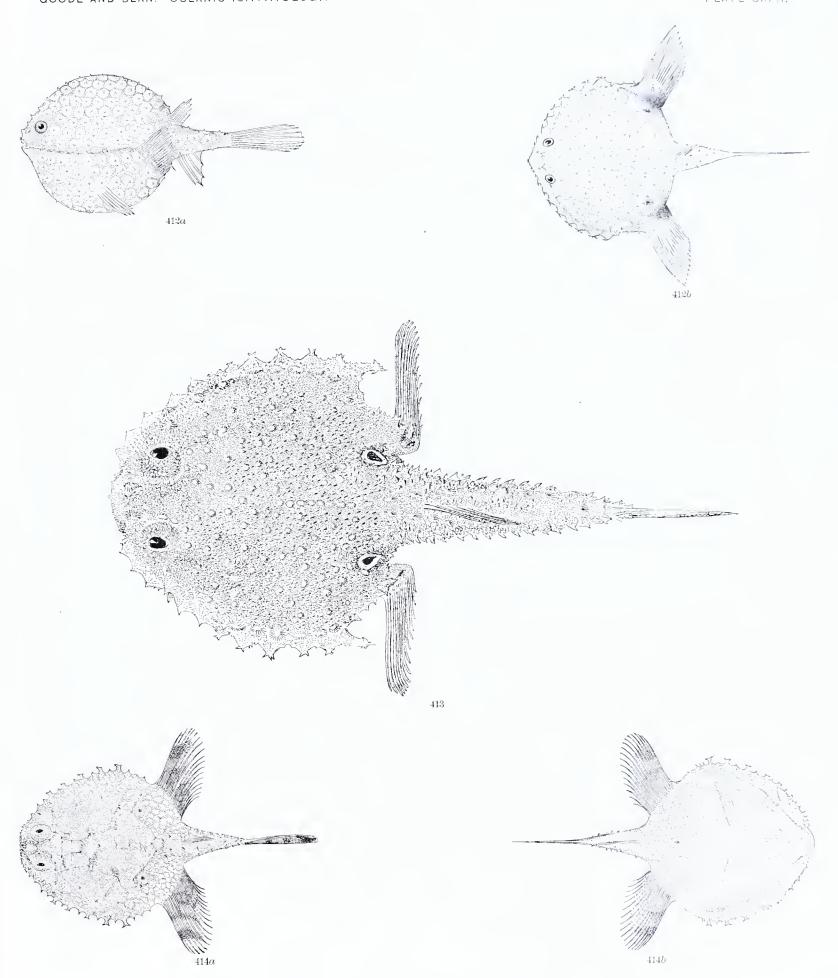




408. Linophryne lucifer. (p. 496.) 410. Halieutæa coccinea. (p. 500.)

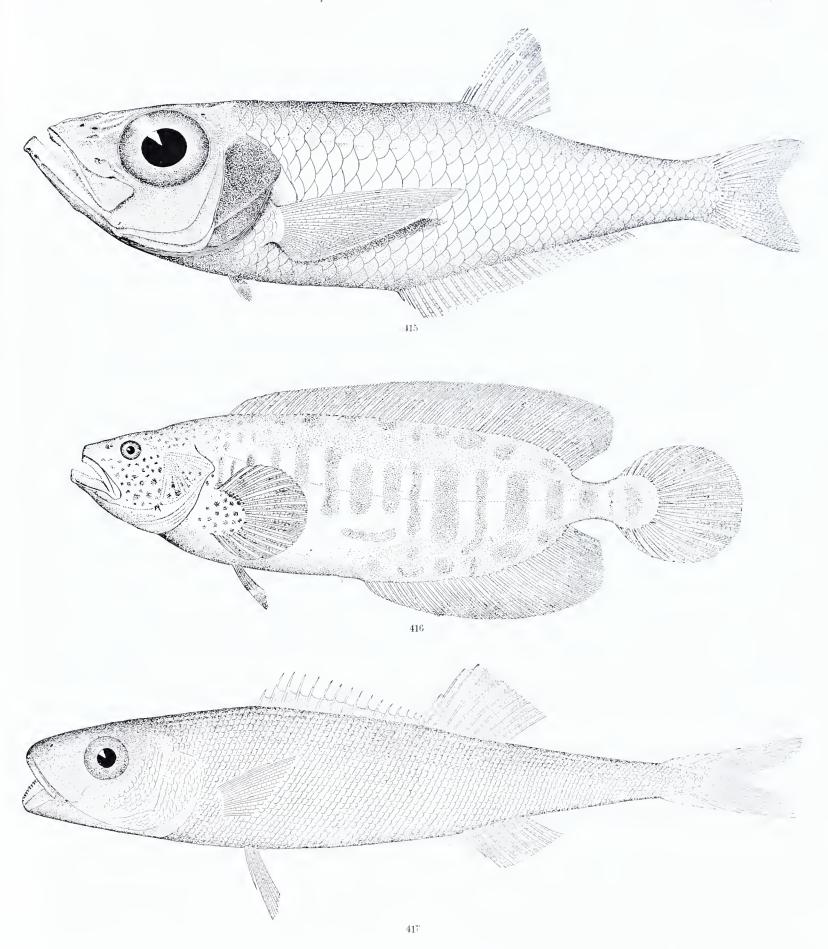
409. CAULOPHRYNE SETOSUS. (p. 196.) 411. Malthopsis luteus. (p. 529.)





412a,b. Halieutella lappa. (p. 500.) 413. Dibranchus atlanticus. (p. 501.) 414a,b. Halieutichthys aculeatus. (p. 504.)





415. Bathyclupea argentea. (p. 190.) 416. Schedophilopsis spinosus. (p. 216.) 417. Tetragonurus Cuvieri. (p. 230.)











PISL-11	
590.7	H 2671
Harvard College	9
Museum of Con	parative Zool-
ogy Atlas to	Vol. 22
	55900

PISL-14

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC INSTRUCTION
STATE LIBRARY

590.7

HARRISBURG

H 2671

In case of failure to return the books the borrower agrees to pay the original price of the same, or to replace them with other copies. The last borrower is held responsible for any mutilation.

Return this book on or before the last date stamped below. 55900

